

The Mining Journal, RAILWAY AND COMMERCIAL GAZETTE:

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

[The MINING JOURNAL is Registered at the General Post Office as a Newspaper and for Transmission Abroad.]

No. 2334.—Vol. L.

LONDON, SATURDAY, MAY 15, 1880.

[WITH SUPPLEMENT.] PRICE SIXPENCE PER ANNUM, BY POST, £1 4s.

**MR. JAMES H. CROFTS, STOCK AND SHARE BROKER,
AND MINING SHARE DEALER,
No. 1, FINCH LANE, CORNHILL, LONDON, E.C.
ESTABLISHED 1842.**

BUSINESS transacted in all descriptions of MINING Stocks and Shares (British and Foreign), Consols, Bonds (Foreign and Colonial), Railways, Insurance, Assurance, Telegraph, Tramway, Shipping, Canal, Gas, Water, and Dock Shares, and all Miscellaneous Shares.

BUSINESS negotiated in Stocks and Shares not having a general market value.
Every Friday a general and reliable List issued (a copy of which will be forwarded regularly on application), containing closing prices of the week.

MINES INSPECTED.
BANKERS: CITY BANK, LONDON—SOUTH CORNWALL BANK, ST. AUSTRAL.

SPECIAL DEALINGS in the following, or part:—
10 Almada, 13s. 6d. 50 Javali, 6s. 6d. 20 Ruby, 29 7s. 6d.
20 Carnarvon Cop., 22s 6d 50 Killfret, 17s. 6d. 20 Richmond, 216 1/4
10 Devon Consols, 213 7/8 25 Leadhills, 23s. 50 S. Roman Gravel, 210 1/2
20 East Crebtor, 21s. 25 Marke Valley, 21 17 6 50 S. Indian Gold, 22 1/2
25 East Caradon, 22 17 6 20 Nouveau Monde, 41s. 3 20 Santa Barbara, 22 1/2
20 E. Roman Grav., 16s 30 N. Penstruthal, 21 1/2 10 So. Condurow, 21 1/2
20 East Van, 23 1s. 9d. 25 N. D'Esby, 20s 30 South Darren, 23 1/2
25 Plagstaff, 21 1s. 9d. 20 N. Herodsfoot, 11s. 6d. 25 S. E. Wynaad, 22 1/2
20 Frontino, 24s. 25 Pandora, 21s. 100 S. Penstruthal, 10s.
20 Glenrock, 21 1s. 9d. 10 Port Nigel, 22s. 10 Tankerville, 24 17s 6d
25 Glenro, 22s. 6d. 100 Port Phillip, 10s. 6d. 10 U. Van & Glyn, 13s.
20 Grosgrin, 23s. 50 Prince of Wales, 15s. 100 West Phoenix, 22 1/2
20 Herodsfoot, 23 17s. 6d. 75 Parys Copper, 21 7 6 10 Wheel Crebtor, 24s.
20 Hingston Down, 13s 9 200 Pestarena, 5s.

RAILWAYS—SPECIAL BUSINESS.

FOREIGN BONDS—SPECIAL BUSINESS.

Fortnightly accounts opened on receipt of the usual cover.

JAMES H. CROFTS, 1, FINCH LANE, LONDON.
ESTABLISHED 1842.

**MR. W. H. BUMPUS, STOCK AND SHARE BROKER,
AND MINING SHARE DEALER,
44, THREADNEEDLE STREET, LONDON, E.C.
ESTABLISHED 1867.**

BUSINESS transacted in STOCK EXCHANGE SECURITIES and MISCELLANEOUS SHARES of every description.
RAILWAYS, BANKS, FOREIGN and COLONIAL BONDS.
TRAMWAYS, TELEGRAPHS, and all the LEADING INVESTMENTS.
Accounts opened for the Fortnightly Settlement
A List of Investments free on application.

MR. BUMPUS has SPECIAL BUSINESS in the undermentioned:—
50 Almada, 13s. 25 Eberhardt, 23 18s. 9d. 50 Pen-Yr-Orsedd.
100 Aberllyn, 22s. 30 Plagstaff, 23s. 6d. 30 Prince of Wales, 15s 6
100 Bodriars. 20 Frontino, 23 18s. 9d. 100 Parys Copper, 27s.
30 Blue Tent, 22s. 15 Fronchoy, 25s. 40 Panulicillo, 24 1/2
40 Bedford Unit., 16s. 20 Grosgrin, 22 1/2. 100 Port Phillip, 11s.
15 Blue Hills, 24 8s. 9d. 5 Great Laxey, 216 1/2. 30 Port Nigel, 22s.
10 Copago, 29 1/2. 25 Great Holway, 21 1/2. 10 Richmond, 216 1/4
100 Consolidated, 19s. 6d. 70 Glenroy, 21s. 6d. 15 Roman Gravel, 210 1/2
50 Colorado, 22 6s. 3d. 30 Herodsfoot, 23 1/2. 20 Ruby, 29 7s. 6d.
5 Cape Copper, 23s. 50 Hingston, 21s. 6d. 25 South Darren, 23 1/2
20 Carnarvon, 21s. 6d. 100 Indian Glenrock, 34s 100 South Indian, 33s. 6d.
2 Carn Bren, 28 1/2. 70 Javali. 15 Tankerville, 24 17s 6d.
15 Devon Cons., 213 7/8. 50 Killfret, 17s. 6d. 5 Van, 21s.
40 Derwent, 22 1/2. 50 Leadhills, 23 18s. 9d. 50 West Phoenix, 22 11 3
100 Don Pedro, 14s. 5 Miners, 212 1/2. 20 Wheel Crebtor, 24 1/2
2 Dolcoath, 25 1/2. 60 Morla Du, 23s. 6d. 20 Wheel Devon Consols.
50 E. Roman Grav., 17s. 20 Melanear, 25 8s. 9d. 25 Wheel Sisters, 23 1/2
5 East Pool, 23s. 40 Marke Valley, 40s. 100 Wheel Jewell, 17s. 6d.
40 East Crebtor, 19s. 6d. 10 Mona, 21 1/4. 5 Wheel Peevor, 22s.
15 East Van, 23 1/2. 75 New Peevor. 10 Wheel Kitty, 25 1/2
25 East Lovell. 100 Nouveau Monde, 41s 3
20 East Caradon, 22 1/2. 40 No. Herodsfoot, 12s.
SPECIAL BUSINESS, at close prices, in the SHARES of all the principal HOME and FOREIGN MINES.

Mr. BUMPUS devotes special attention to these Securities, and is in a position to afford reliable information and advice to intending investors and others. The following Mines are particularly recommended:—
WHEEL GRENVILLE. WHEEL PEEVOR. WEST PEEVOR.
NEW PEEVOR. WHEEL SISTERS. WEST PHENIX.
PEN-YR-ORSEDD. DERWENT. SOUTH DARREN.

WILLIAM HENRY BUMPUS, SWORN BROKER.
OFFICES: 44, THREADNEEDLE STREET, LONDON, E.C.
ESTABLISHED 1867.

**MR. J. ROSEWARNE, 3, COPHALL BUILDINGS,
LONDON, E.C.**
For some weeks past I have persistently called attention to the exceptional merits of WEST DEVON CONSOLS. I have now returned from a personal inspection of this property, and can say without hesitation that the recent discovery is the best that has been made in this famous district for many years. Shares have advanced to 28, and will go considerably higher. It is gratifying for me to know that my opinion is now confirmed by many practical miners. Shares should be secured without delay.

**FERDINAND R. KIRK, 5, BIRCHIN LANE,
LONDON, E.C.**
FORTNIGHTLY ACCOUNTS opened, on receipt of the usual "cover," in Railways Home and Foreign, Mining Shares, Foreign Bonds, and certain Miscellaneous Securities.

"THE WEEK"—A SEPARATE EDITION from that which appears in the Mining Journal is published every Wednesday evening, containing "Notes and Hints on the Stock Markets," with Closing Prices. May be had on application. BANKERS: LONDON AND WESTMINSTER, Lothbury.

**MR. E. J. BARTLETT, BRITISH AND FOREIGN STOCK
AND SHARE DEALER, No. 30, GREAT ST. HELEN'S, LONDON, E.C.**
PEN-YR-ORSEDD, GREAT HOLWAY, and WEST HOLWAY shares should have a great rise—rich courses of ore proved.

JUST OUT.
HOW TO INVEST, post free, 1s., Fourteenth Edition, much enlarged.

**CHARLES J. SIMS, MINE OWNER, STOCK AND SHARE
DEALER, 2, DRAPER'S GARDENS, THROGMORTON STREET,
LONDON, E.C.**

(Late of Tavistock, Devon, the centre of the Devon Consols District.)
Special and reliable information and advice on the mines of Devon and Cornwall, and of the Llanrwst District.

Twenty-five years experience in Mining.
Special information on Manganese Mines at home and abroad.
All business entrusted to C. J. SIMS will have careful and prompt attention.

**MESSRS. ENDEAN AND CO., STOCK AND SHARE
DEALERS, 85, GRACECHURCH STREET, LONDON, E.C.
ESTABLISHED 1861.**

BANKERS: LONDON AND WESTMINSTER, Lothbury; and
BARCLAY, BEVAN, and CO., Lombard-street, E.C.

Messrs. ENDEAN and Co. strongly advise the purchase of well selected Lead Mines at present low prices:—Van, Great Laxey, Roman Gravel, Llanrwst, and Tamar, also South Wheel Crebtor (Copper). The next great rise will be in Lead Shares, and many of these now offering will be eagerly sought after at considerably higher prices immediately there is a run upon them.

Messrs. ENDEAN and Co. are prepared to deal in all the shares they recommend at close prices.
Messrs. ENDEAN and Co. strongly advise the purchase of CARN CAMBORNE shares. This mine lies between Dolcoath and South Condurow: the former is selling for over £300,000, and the latter for nearly £80,000. Carn Camborne is in 6000 shares, now to be had for £2 5s. each. Vigorous operations will be at once commenced, and there is every reason to believe that Carn Camborne will prove in depth as rich as any of the great mines by which it is surrounded. Shares are CERTAIN to have a considerable rise in price. Good sales of tin and copper will be commenced within one month after the mine is in full work.

STOCK AND SHARE MARKETS.

Prices of STOCKS and SHARES in RAILWAYS, BANKS, ENGLISH and FOREIGN GOVERNMENT SECURITIES, GAS, MINES, INSURANCE, and other Stock Exchange Securities, and various important information forwarded on application to—

MESSRS. PETER WATSON AND CO.,
18, AUSTIN PRIARS,
OLD BROAD STREET, LONDON, E.C.
BUYER and SELLER of SHARES at the close Market Price of the day.
BANKERS: THE ALLIANCE BANK (Limited).

**MESSRS. PETER WATSON AND CO.'S
BRITISH AND FOREIGN MONTHLY MINING NEWS
—STOCK AND SHARE INVESTMENT NOTES—MINES,
MINERALS, AND METAL MARKETS—SHARE LIST,
No. 817, Vol. XV., for APRIL month, is now ready, and will
be sent to customers on application.**

Annual Subscription..... 5s. [Single Copy..... 6d.

MESSRS. PETER WATSON AND CO.,
18, AUSTIN PRIARS, E.C.

**MR. ALFRED E. COOKE,
DEALER at NET PRICES in EVERY DESCRIPTION of STOCKS
and SHARES,
76, OLD BROAD STREET, LONDON.
ESTABLISHED 1853.**

Over 13 years at the above offices, adjoining the Stock Exchange and Mining Markets.

WHAT SHARES DO YOU RECOMMEND FOR AN EARLY ADVANCE?

Investors requiring a reply to this question should send for the INVESTORS' GAZETTE, published next Friday. Post free three stamps. The INVESTORS' GAZETTE has given more profitable advice than any Private Circular.

Edited by—**MR. ALFRED E. COOKE,**
76, OLD BROAD STREET, LONDON.

STOCKS and SHARES,
FOREIGN BONDS, TELEGRAPHS, TRAMWAYS, RAILWAYS, AND
OTHER LEADING SECURITIES.

**MR. JAMES STOCKER, STOCKBROKER,
2, CROWN COURT, THREADNEEDLE STREET, LONDON, E.C.
ESTABLISHED 1848.**

SPECIAL BUSINESS in the following:—
Almada Consols., 13s. Gunnslake (Clit.), 25s.
Carn Bren, 28 1/2. Glenrock, 32s. 6d.
Chonates, 23s. 6d. Herodsfoot, 23 18s. 9d.
Consolidated, 18s. 9d. Hingston, 21s.
Derwent, 22 1/2. Ladywell, 10s.
Devon Gt. Cons., 213. Leadhills, 22 17s.
Don Pedro, 13s. 6d. Last Chance.
E. Rom. Gravel, 16s. 6d. Marke Valley, 37s. 6d.
East Caradon, 22 18s 6d. North Penstruthal.
East Crebtor, 19s. 6d. Nouveau Monde, 42s 6d.
Eberhardt, 23 18s. 3d. N. Zool. Kapanga, 23s 9d.
Emma, 12s. 6d. Parys Corpora., 25s. 6d.
Exchequer. Pestarena, 5s. 9d.
Flagstaff, 29s. Polrose, 46s. 9d.
Glenroy, 20s. Port Phillip, 11s.

**JOHN B. REYNOLDS, STOCK AND SHARE DEALER,
37, WALBROOK, LONDON, E.C.
ESTABLISHED 20 YEARS.—BANKERS: LONDON & SOUTH-WESTERN.**

Mr. REYNOLDS deals promptly at close prices in all descriptions of Stocks and Shares, making a speciality of MINES, concerning which he can get accurate information.

Mr. REYNOLDS points to the results of his recommendation of Mines in the Peevor district as an illustration of the profits which can be made, and irrespective of market fluctuations, which no one can foresee.

He emphatically recommends the purchase of BLUE HILLS and WEST PEEVORS, and notes the advance which has taken place in these shares since last Saturday, and also refers to his repeated recommendations of them.

WEST KITTY will be the leading mine in the St. Agnes district, and must inevitably have a still further and great advance in market value.

Mr. REYNOLDS also recommends NEW COOK'S KITCHENS, NEW KITTS, and WEST PEEVORS for a rise of more than cent. per cent.

NOTICE OF REMOVAL.

**GRANVILLE S HARP,
32, QUEEN VICTORIA STREET, LONDON, E.C.**

**MR. EDWARD ASHMEAD HAS REMOVED from
Cornhill Chambers, 62, Cornhill, London, E.C., to
No. 2, DRAPER'S GARDENS, THROGMORTON STREET,
LONDON, E.C.**

**MR. W. B. COBB, STOCK AND SHARE DEALER,
29, BISHOPSGATE-STREET, LONDON, E.C.**
Business transacted in every description of Stocks and Shares. Fortnightly accounts opened on receipt of usual cover.

BWLOH UNITED.—The dressing-floors will shortly be ready to prepare for market the large quantity of ore now at surface, from which a good dividend is secured.
BANKERS: ALLIANCE BANK (Limited).

THE IMPORTANT DISCOVERY OF LEAD AT SOUTH D'ERESBY MINE.

SPECIAL REPORT, by Capt. ABRAHAM FRANCIS, post free on application to EKINS and CO., 14, QUEEN VICTORIA STREET, LONDON, E.C.

**FRANCIS FRANCIS,
MINING ENGINEER, STOCK AND SHARE BROKER,
CORN EXCHANGE CHAMBERS, CHESTER.**

FOR INFORMATION concerning latest development of the HALKYN DISTRICT MINES DRAINAGE COMPANY, presided over by HIS GRACE THE DUKE OF WESTMINSTER, and now being successfully prosecuted for the purpose of draining, by means of Adit Levels or Tunnels, some of THE RICHEST AND MOST RENOWNED MINES in THIS COUNTRY (safe, and, it is believed, unequalled Investments); also for information concerning PITANGUI, SANTA BARBARA, and other Brazilian Gold Mines, offering indubitable prospects of success.—Apply to above.

**MR. JOHN L. M. FRASER,
(Fourteen Years at the Great Miners' Mines)
CONSULTING MINING ENGINEER, &c.,
GREENFIELD HOUSE, WREXHAM.**

Mines managed and Secretarial from £150 per annum. Inspections from £3 3s., and expenses.
All descriptions of MINING PLANT and STORES at the lowest possible prices. Enquiries courted.

PROFITABLE INVESTMENT, estimated to yield 25 per cent. per annum, and increase in value 300 to 500 per cent. BRITISH SILVER-LEAD MINES: Large bodies of rich silver-lead and blende ores proved in Eastern shaft, and for several hundred yards west. Only a few shares at 2 1/2 each ON SALE. Report of Capt. A. Francis, Gwernymynydd Mines, and all information on application.

**MR. CHARLES THOMAS
MINING AGENT, STOCK AND SHARE DEALER,
3, GREAT ST. HELEN'S, LONDON, E.C.**

**MR. ALFRED THOMAS,
MINING AGENT, AND STOCK AND SHARE DEALER,
10, COLEMAN STREET, LONDON, E.C.**

Second Edition, price 6d.
"HOW TO TAKE ADVANTAGE OF THE COMING RISE IN PRICES,"

TO INVESTORS, SHAREHOLDERS, TRUSTEES.
SAFE DIVIDEND INVESTMENTS PAYING 4 TO 6 AND 10 PER CENT.
PER ANNUM ON PRESENT OUTLAY.

SHARP'S INVESTMENT CIRCULAR.
The MAY EDITION (post free),

SHOULD BE CONSULTED BY INVESTORS AND SHAREHOLDERS.
It is a Reliable "Guide," giving valuable information and Sound Advice, It gives Market prices; Dividends upon outlay, when payable; Reports, &c., IT CONTAINS ALL THE SAFE INVESTMENTS IN THE FOLLOWING:—

English, Foreign Railways. Insurance, Gas, Waterworks.
Preference, Debenture Stocks. Colonial, Foreign Stocks.
Indian, American Stocks. British, Foreign, Colonial Mines.
Bank, Financial Shares. Tea, Land Shares.
Tramway, Telegraph Shares. Shipping, Dock Shares.
Municipal Bonds. Miscellaneous Shares, &c., &c.

**HENRY GOULD SHARP, STOCK AND SHARE BROKER,
42, POULTRY, LONDON, E.C.—ESTABLISHED 1852.**
BANKERS: LONDON AND WESTMINSTER, Lothbury, London, E.C.

TO INVESTORS IN MINES.—SPECIALLY RECOMMENDED.

A SAFE INVESTMENT, PAYING £11 10s. PER CENT. PER ANNUM.
DIVIDENDS WILL INCREASE—SHARES WILL RISE
100 TO 200 PER CENT.

H. GOULD SHARP advises the purchase of SOUTH DARREN shares for a rise of 100 to 200 per cent., excluding present dividends of £11 10s. per cent. per annum, at present price, £3 10s. per share. They are the cheapest Lead shares on the market, and safe to buy.

**SOUTH DARREN SILVER-LEAD MINE (LIMITED),
CARDIGANSHIRE, SOUTH WALES.**
IN 9000 SHARES OF £1 10s. EACH. FULLY PAID. PRICE £3 10s. PER SHARE.

No further liability.
This valuable and profitable Silver-Lead Mine is situated in the rich mineral district of Cardiganshire, a district which has proved immensely profitable, in which hundreds of thousands of pounds have been paid in dividends.

RETURNS.—They sell 55 tons of silver-lead ore monthly, excluding copper, making a profit of over £1000 per quarter. These profits will shortly increase, but with the present price for lead shares pay 11 1/2 per cent. per annum at £3 10s. each. Shares will rise considerably in value, and dividends increase to 12s. or 15s. and 20s. per share yearly on £3 10s. per share. Under former disadvantages of working this property it gave the shareholders nearly £7000 in dividends.

PROFITS.—The present profits are over £350 per month on 55 tons of silver-lead ore (including copper), and with increased monthly sales dividends will increase 100 per cent., and shares rise 100 to 200 per cent.

DIVIDENDS.—The dividends are paid quarterly. January dividend was 2s. per share. April dividend was 2s. per share, and but for the fall in lead would have been 2s. 6d. per share. July dividend will be 2s. per share.

After providing for the April quarterly dividend of 2s. per share (£900), and paying the cost sheet due on 17th of that month, there remained a credit balance of £1014, carried forward to next quarter.

RESERVES.—The present reserves of silver-lead ore (exclusive of tribute pitches) are estimated at 1700 tons, which at £16 per ton gives a money value of £27,200.

TO INVESTORS.—I advise my readers to secure 100 to 1000 shares, at £3 10s., and hold them for investment. They will make 100 to 200 per cent. profit within a year, excluding 11 1/2 per cent. for their present outlay. Shares are honestly worth 4s. and cheap at that price considering the greatly improved prospects of the eastern part of the mine, where the ground is unwrought, and the lode in the 110 fathom level is now worth £12 per fathom. The lode in the bottom of the mine is worth £30 per fathom for lead, and they will forthwith sink in this lode—a most important feature.

FOUR MONTHS' SALES OF ORE FROM SOUTH DARREN FOR 1880.

SILVER-LEAD ORE SOLD.

1880.	No. of tons.	Price.	Total.
Jan. 9	50	£18 4 0	£910 0 0
Feb. 2	55	17 16 6	987 10 0
March 19	55	16 10 0	907 10 0
April 16	55	16 0 0	880 0 0
			£3693 0 0

COPPER ORE SOLD.

Jan. 9	15	£9 18 0	£148 10 0
April 16	35	2 18 6	102 7 6
	33	2 8 0	75 18 0
	17	8 1 0	136 17 0
			463 12 6

Making a total of Lead and Copper for four months of £4156 12 6

TO INVESTORS.—Compare South Darren with the following Lead Mines:—

No. of shares.	Mine.	Price per share.	Dividends per year.	Per cent. present price.	Market value.
15,000	Van	£18 10 0	£10 0 0	£8 0 0	£277,500
15,000	Great Laxey	18 10 0	0 12 0	8 12 6	277,500
12,000	Roman Gravel	10 10 0	0 15 0	7 2 8	128,000
12,000	Tankerville	15 0 0	NIL	NIL	57,000
20,000	Leadhills	3 0 0	NIL	NIL	60,000
20,000	Grosgrin	3 0 0	NIL	NIL	60,000
18,000	East Van	3 10 0	NIL	NIL	63,000
9,000	SOUTH DARREN	3 10 0	0 8 0	11 10 0	31,500

This proves South Darren to be by far the cheapest share, and if they pay £11 10s. per cent. yearly with present price of lead they will double their dividends and shares double or treble their present value with a rise in lead, which will come. Shares are far below their intrinsic value, being honestly worth 4s per share now.

PRESENT RETURNS are 55 TONS of lead ore MONTHLY (these returns will increase) at £16 per ton for three months £2640 0 0

Add copper ore 280 0 0—£2900 0 0

Working cost for three months £1655 0 0

Dues at 1-20th 145 0 0

Sundries (say) 100 0 0—1900 0 0

Minimum profit per quarter £1000 0 0

Or profit for the year at 55 tons of lead per month..... £4000 0 0

Showing a dividend of £13 per cent. per annum on shares at £3 10s. each.
NOTE.—50 tons of silver-lead ore sold in January for £910, while 55 tons sold in April for £880, a difference of £130 less, including the 5 extra tons. Had lead not fallen the 55 tons would have realised £1001, a difference of £1452 on 12 months' sale, hence I advise the PURCHASE of South Darren shares at £3 10s.

I am a BUYER of FIVE HUNDRED or ONE THOUSAND SHARES at £3 7s. 6d. each.

**HENRY GOULD SHARP, STOCK AND SHARE BROKER,
42, POULTRY, LONDON, E.C.—ESTABLISHED 1852.**

BANKERS: LONDON AND WESTMINSTER, Lothbury, London, E.C.

**MR. THOMAS THOMPSON, JUN., STOCK BROKER,
16, ST. SWITHIN'S LANE, E.C.**

Mr. THOMPSON transacts business in every species of Stock Exchange and Mining Securities.

Mr. THOMPSON affords reliable information to investors, and can give, when desired, a list of first-class Stocks and Shares, yielding 4 to 10 per cent. dividends upon present prices.

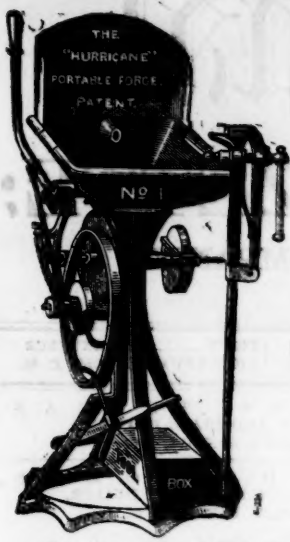
Mr. THOMPSON's weekly Circular may be had on application.

IMPORTANT TO SHAREHOLDERS AND INTENDING INVESTORS.

**MESSRS. THOMPSON AND SON, 14, OLD TOWN STREET,
PLYMOUTH,** in their publication, "SOW AND REAP," point out the most desirable and profitable investments for money. Sent post free on application. The May number is now in the Press.

The Fortescue (Stannagwyn) shares should be bought at once.

A COMPLETE, PORTABLE, AND EFFICIENT SMITHY FOR £7 7s.



THE "HURRICANE" PORTABLE FORGE

(HARDINGE'S PATENT).

A Complete
and
Portable Smithy,
possessing a
Powerful Blast,
a Forge,
a Hearth,
a Vice,
an Anvil,
a Rivetter's Hearth,



a Brazier's Hearth,
a Mine Ventilating Apparatus,
a Tool Grinder (Emery),
a Cutter,
a Circular Saw and Bench,
a Polishing Wheel,
a Chuck,
Two Drills,
a Drill Rest,
and a Tool Box.

PATENTED IN EUROPE AND AMERICA.



The "HURRICANE" Patent Portable Forges possess advantages unobtainable with Forges of any other description. They commend themselves to the world, not only as being complete and portable Smithies and mine and ship ventilators of the highest practical value, but also for the extreme ease with which they are worked, the simplicity and compactness of their construction, and the steady continuous blast, which speedily creates an unusually high degree of heat. The "Hurricane" Portable Forges are made in nine distinct sizes, embrace attachments which form a complete smithy, and are suitable for all purposes in all climates.

The Rivetter's Hearth is readily connected to the nozzle of the forge by means of a flexible tube, and can be used in any awkward position for keeping rivets hot and close to the work. The Brazier's Hearth is similarly worked, but is constructed with a nozzle on opposite sides for producing heat equally on both sides of the work, and is particularly adapted for brazing band saws, &c. Hand Blowers for all ventilating purposes, and for fixed blacksmiths' hearths, are made on a new principle.

The Lever Handle can be used at any angle, or taken off altogether, and the Treadle used instead. There is a Recovering Spring to raise the Handle or Treadle. This arrangement secures all the easy motion of the old-fashioned bellows, is worked with much less effort than the Rotary Hand Wheel, and there are no Leather Bands to be burnt, no Cranks, and consequently no "Dead Centres." Three larger sizes than those given below are kept in stock.

A 1-INCH BAR OF IRON CAN BE RAISED TO A WELDING HEAT IN TWO-AND-A-HALF MINUTES.

PRICES.

No. 0.—THE AMATEURS', JEWELLERS', OR DENTISTS' FORGE AND WORKSHOP, 3 ft. by 1 ft. 6 in., and 2 ft. 8 in. high, fitted as a complete Smithy, including Forge, 6-in. patent Fan Blast, Hearth, Parallel, Vice with Anvil, Emery Wheel, Chuck, 2 Drills, a Cutter, Polishing Wheel, Crucible and Tongs, Ladle, Spanners, Drawers, Treadle and Flexible Band, Automatic Clutch, &c., &c. Weight, 84 lbs. Muffler, for conveying the smoke to chimney, 15s. extra.	£8 8s. 0d.
No. 1.—FORGE, HEARTH (lined with fire-brick), and PAN 18 in. square, 2 ft. 7 in. high. Weight 132 lbs., with 8-in. patent Fan Blast, Spanners, and Emery Tool Grinder, complete, on standard	£5 15s. 0d.
No. 2.—DITTO. Weight, 156 lbs. Fitted with 2½-in. Vice with Anvil, 4-in. Emery Wheel or Grindstone, Chuck, Cutter, and two Drills, a Buffing Wheel or Polisher, Spanner, Tool Chest, Lock and Key, &c. Lever and Treadle. Muffler, 15s. extra.	£7 7s. 0d.
No. 3.—FORGE AND HEARTH, 26 in. by 34 in. Weight, 160 lbs.: 10-in. patent Fan Blast, Spanners, and 5-in. Emery Wheel, complete on frame with four legs and two travelling wheels. Lever and Treadle	£8 8s. 0d.
No. 4.—DITTO. Weight, 184 lbs. Fitted with Two Travelling Wheels, 5-in. Circular Saw and Bench, and all the attachments of No. 2 Forge, but increased in suitable proportions. Hood, 21s. extra. Muffler, 35s. extra.	£10 10s. 0d.
No. 5.—FORGE AND HEARTH, 30 in. by 42 in. Weight, 250 lbs. With 12-in. patent Fan Blast, Spanners, and 6-in. Emery Wheel, complete on frame with four legs. Fitted with Lever Treadle, Two Travelling Wheels, and Fast and Loose Pulleys for power	£12 12s. 0d.
No. 6.—DITTO. Weight, 280 lbs. Fitted with all the attachments of Nos. 2 and 4 Forges, but proportionately increased in size. Hood, 30s. extra. Muffler, 42s. extra	£15 15s. 0d.

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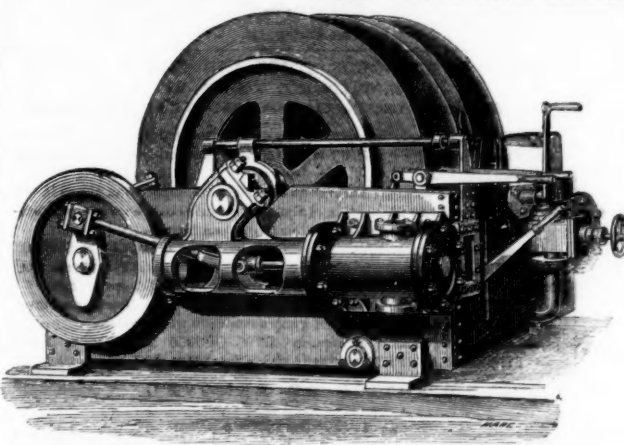
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WORKS—GLANDOVEY, NORTH WALES.

ABRIDGED PROSPECTUS.

The object of this company is to work the slate quarries acquired by this company, situated at Glandovey, in the county of Cardigan, one mile from the navigable River Dovey and the Glandovey Station on the Aberystwith and Welsh Coast Railway.

The property comprises 101 a. 2 r. 22 p., or thereabouts, and is held under a lease from Lewis Pugh Esq., M. P., for 40 years from the 5th of February, 1879, with all rights of quarrying, way, water, and other rights held or enjoyed by the vendor, together with the buildings, machinery, tramcars, and other effects upon the premises, subject to the payment of an annual surface rent of £10 only, and a royalty of 3s. per ton on slate used for slabs, and 2s. 6d. per ton on all other slates, the royalty to merge into a dead rent of £50 per annum.

The vein of slate rock running through the property is more than half-a-mile in length and about 150 ft. in width, rising on the mountain side, and is in an advanced state of development. Three large openings have been made, from which slates and slabs of a very superior quality have been obtained, and are now being prepared for sale.

The vein of slate is seen the whole distance through the property close to surface, leaving very little to be removed, an advantage not generally possessed by other quarries. The veins are pronounced by competent judges to be the true Corris slate vein, and precisely similar in colour and texture to the best Bangor slate, having regular joints and perfect cleavage, a blue colour, and free from spots. Owing to the gentle slope of the mountain several galleries can be worked at the same time, and a large number of men employed on each without interfering with each other, there being ample space for depositing or tipping the rubbish.

One important feature of this undertaking is that a stream of water flows through the quarry at all seasons of the year of sufficient volume to drive the requisite machinery, thereby saving the cost of steam-power.

Another important feature is the proximity of a shipping port and railway, giving a marked advantage over other quarries, which have to traverse many miles of tramway to the railway station.

The cost of production is calculated not to exceed one-half the selling prices, and it is estimated that the Glandovey Quarry will produce 250 tons monthly, on which the annual profit may fairly be taken at £3000.

The company have commenced the production of slates and slabs of many tons weight. These will be in the market as soon as the wharf at the Glandovey Railway Station is ready, there being a local demand for all the quarry can produce.

The directors have personally inspected the quarry, and from the knowledge so derived of its capabilities, can confidently recommend investment in the shares and debentures in this company, and they invite intending investors to visit the quarry and judge for themselves.

No promotion money has been or will be paid.

The only agreements entered into are one dated 5th May, 1879, and made between William Frederick Richardson of the one part, and John George Nowlan of the other part; and one dated the 14th day of April, 1880, between the said W. F. Richardson and John Huish, on behalf of the company, by the terms of which agreements the property has been acquired for the sum of £5000.

Registration of New Companies.

The following joint-stock companies have been duly registered:—

DEEP LEVEL MINING COMPANY (Limited).—Capital 20,000l., in shares of 1l. To acquire on lease the Halkin and Deep Level Mines, situate in Flintshire, along with the works, plant, machinery, and effects thereunto appertaining, and any other mining property, selling or disposing of the same, granting licences, and all other similar rights reserved. The subscribers (who take one share each) are:—S. J. Wilde, 10, Serjeants' Inn, barrister; R. Taylor, 6, Queen-street-place, C.E.; J. Taylor, 6, Queen-street-place, C.E.; R. H. Taylor, 6, Queen-street-place, C.E.; J. C. Leaver, 6, Queen-street-place, secretary; W. G. Williams, 5, Queen-street-place, secretary; J. Elphick, West Hackney, accountant. The subscribers will determine the first directors, and the general managers shall be J. Taylor and Sons, of Queen-street-place.

THE SURREY AND HAMPSHIRE CANAL CORPORATION (Limited).—Capital 100,000l., in shares of 10l. To acquire, purchase, and construct Canals anywhere in England. The subscribers (who take 1 share each) are:—W. A. Wheatley, Rotherhithe; W. R. Atkinson, 124, Earl's Court-road; J. H. Thornton, Romford; W. T. Bond, Bermondsey; J. H. Baily, Belsize Park; D. C. Laughton, Canonbury; F. Mureton, Chelsea.

THE WEAVERS' COMPANY (Limited).—Capital 10,000l., in shares of 10l. To carry on the business of cotton manufacturers, dyers, finishers, &c. The subscribers (who take 1 share each) are:—A. N. d'Andria, Stockport; J. Pickford, Manchester; J. N. d'Andria, Salford; P. N. d'Andria, Manchester; J. L. Gustiniani, Manchester; R. T. Seward, Manchester; M. N. d'Andria, Salford.

THE NATIONAL POLYTECHNIC SOCIETY (Limited).—Capital 20,000l., in shares of 1l. The promotion, introduction, and management of Popular Entertainments. The subscribers are:—E. Morris, Spalding; 5; H. H. Harvey, Spalding; 5; W. Crust, Spalding; 10; G. Sly, Spalding; 2; J. Woodward, Spalding; 2; J. T. Atton, Spalding; 2; G. Makin, Spalding; 2.

THE INVALIDS CLUB ASSOCIATION (Limited).—Capital 15,000l., in shares of 5l. To establish and conduct convalescent homes, clubs, &c. The subscribers (who take one share each) are:—J. Hastings, 449, Strand; J. Biggs, 65, Alderney-street; C. E. Pritchard, St. Leonard's-on-Sea; E. Walker, 1, Queen Victoria-street; J. Fairfax, 1, Queen Victoria-street; A. Nordberg, 1, Queen Victoria-street; J. Robinson, 6, Woodbury Grove.

THE DAIRY SUPPLY COMPANY (Limited).—Capital 100,000l., in shares of 10l. To continue a business established in Little Russell-street and Museum-street. The subscribers (who take one share each) are:—G. Barham, 28, Museum-street; R. Barham, 33, Camden-road; R. Morley, Enfield; A. Tallicks, 9, Alma-street; E. H. Hattersley, 16, Brook-street; A. J. Kearley, 1, Dean-street.

THE LLANDUDNO HYDROPATHIC AND WINTER RESIDENCE COMPANY (Limited).—Capital 25,000l., in shares of 10l. To acquire and continue a hydropathic business at Llandudno. The subscribers are:—H. Thomas, Llandudno, 400; H. Kimber, 79, Lombard-street, 20; J. C. Barnett, 2, Finsbury-circus; 5; W. Bayes, 21, Henrietta-street; 5; J. Constantine, 23, Oxford-street; 10; R. Roberts, Portmadoc; 5; H. Gardner, Birkenhead, 10.

"ST. MARY'S" ORGAN COMPANY (Limited).—Capital 100,000l., in shares of 10l. The manufacture and sale of musical instruments. The subscribers (who take one share each) are:—J. B. Hamilton, Greenwich; H. Smith, Cadogan-terrace; C. J. Longman, 36, Hyde Park-square; W. Leaf, Cobham; G. P. Bevan, Richmond; W. D. Malton, Junior Carlton Club; W. Merick, 2, Cloisters.

THE OLDHAM BRITANNIA MILLS COMPANY (Limited).—Capital 15,000l., in shares of 5l. To purchase or otherwise acquire certain mills for the manufacture of cotton, &c. The subscribers are:—F. Ramsbottom, Rochdale, 667; E. Buckley, Lees, 583; L. Broadbent, Lees, 583; J. Richardson, Oldham, 223; G. Livsey, Rochdale, 167; S. Broadbent, Oldham, 222; H. Broadbent, Manchester, 333.

THE COLONIAL FRESH MEAT COMPANY (Limited).—Capital 200,000l., in shares of 5l. To import fresh meat and other produce, cattle, &c., from the colonies. The subscribers are:—E. A. Pontifex, 89, Lancaster Gate, 100; M. Bell, Queensland, 100; Lord G. G. Campbell, 2, Bryanston-square, 100; J. D. Hills, Herts, 100; T. McIlwraith, Brisbane, 100; A. McIlwraith, 34, Leadenhall-street, 1; J. N. McEacham, 34, Leadenhall-street, 1; J. A. Campbell, Highgate, 1; G. Hardy, Forest Drive, 1.

THE CIRENCESTER IMPROVED DWELLINGS COMPANY (Limited).—Capital 5000l., in shares of 10l. To provide improved dwellings in or near Cirencester. The subscribers are:—G. F. Newmarch, Cirencester, 10; F. Cripps, Cirencester, 10; R. Ellett, Cirencester, 10; C. S. Smith, Cirencester, 10; T. Warner, Cirencester, 10; E. Finch, Cirencester, 5; G. H. Harmer, Cirencester, 10.

JUNIOR ARMY, NAVY PROVISION MARKET (Limited).—Capital 100,000l., in shares of 5l. To carry on the usual business of a co-operative society. The subscribers (who take one share each) are:—F. R. Wurthen, 390, Strand; R. S. Thorpe, Southwark; W. Scott, 27, Sackville-street; E. Gardner, Battersea; J. Keyworth, 20, Regent-street; J. Jacobs, 23, Queen Victoria-street; J. W. Locke, 21, Upper Woburn-place.

THE ARLESEY BRICK AND LIME COMPANY (Limited).—Capital 25,000l., in shares of 25l. To carry on the business of brickmakers and lime and cement manufacturers. The subscribers (who take one share each) are:—A. H. Bacon, 13, Stanhope-place; J. Matthews, Stevenage; G. Moffatt, Temple; E. H. Ellis, 29, Moorgate-street; S. Roberts, 22, Moorgate Station Buildings; H. Earle, 15, Denbigh-place; J. S. Coleman, 13, Clement's Inn.

BRITISH AND SCANDINAVIAN STEAMSHIP COMPANY (Limited).—Capital 100,000l., in shares of 10l. To carry on a shipowners' business in all its branches. The subscribers (who take one share each) are:—R. Barker, Liverpool; E. Scales, Manchester; W. Prowse, Liverpool; H. S. Hamilton, Liverpool; J. Hunter, Liverpool; S. Helme, Manchester; J. R. Banner, Liverpool.

CITY OF LIVERPOOL DEPOSIT AND INVESTMENT COMPANY (Limited).—Capital 15,000l., in shares of 5l. Taking moneys on deposit and lending sums on all kinds of securities. The subscribers (who take one share each) are:—J. M. Intyre, Seaford; S. Richardson, Liverpool; A. Casentilli, Liverpool; J. W. Lambie, Liverpool; T. Mercer, Liverpool; R. Casson, Liverpool; J. Marr, Liverpool.

THE NANTWICH SALT SPRING BATHS COMPANY (Limited).—Capital 80,000l., in shares of 10l. To establish hydropathic establishments and baths in Cheshire. The subscribers (who take one share each) are:—J. R. Banner, Hington; R. Barker, Liverpool; J. Carr, Liverpool; W. Cooper, Nantwich; H. C. List, Nantwich; F. Radcliff, Liverpool; W. F. Morecroft, Bromborough.

WHEAL FORTUNE MINING COMPANY (Limited).—Capital 5000l., in shares of 1l. To carry on the business of miners, smelters, metallurgists, manufacturers of chemical and other products, and dealers in ores, minerals, metals, chemicals, &c., and for such purpose to acquire any suitable properties, mines, and mining rights, premises, &c. The subscribers are:—J. F. Penny, Birmingham, corndealer, 5; W. Dain, Birmingham, draper, 10; J. Onion, Birmingham, chemist, 1; W. W. Hulme, Birmingham, clerk, 1; W. S. Dowling, Birmingham, clerk, 50; E. C. Swindon, Birmingham, commission agent, 5; J. Whitehouse, Birmingham, clerk, 1. The subscribers to appoint the directors, whose numbers must not exceed seven or be less than three.

THE LION LIFE INSURANCE COMPANY (Limited).—Capital 1,000,000l., in shares of 10l. To carry on an insurance business in England and abroad. The subscribers are:—J. Staniforth, Coleman-street House, 1000; C. Eccles, 59, Finchley-road, 1000; J. Morris, 6, Old Jewry, 1000; W. C. Quilter, 14, King's Arms-yard, 1000; W. Forbes, 14, Ashley-place, 500; H. Leslie, South Hampstead, 1000; Lord C. Hamilton, 23, Lowndes-square, 500; Lord E. Cecil, 32, Eccleston-square, 300; S. Herbert, Wilton, 100; F. Fish, Ipswich, 500.

THE WESTERN COYNEY AND CINDERHILL COAL AND BRICK COMPANY (Limited).—Capital 30,000l., in shares of 5l. To carry on the trades of coal merchants and brick manufacturers. The subscribers (who take one share each) are:—R. Hodson, Longton; M. Forrester, Longton; G. Lowe, Stalybridge; J. Taylor, Manchester; J. Ashworth, Salford; W. Bradshaw, Salford; T. Thomas, Rawten-stall.

TYNEMOUTH BATH HOTEL COMPANY (Limited).—Capital 15,000l., in shares of 100l. To carry on the business of hotel and boarding-house proprietors. The subscribers (who take one share each) are:—W. A. Potter, Tynemouth; P. J. Messent, Tynemouth; F. R. Goddard, Newcastle; F. R. N. Haswell, North Shields; T. Y. Bramwell, Tynemouth; H. C. Armstrong, Tynemouth; F. Springman, Gosforth.

PATENT DRY-AIR REFRIGERATING COMPANY (Limited).—Capital 5000l., in shares of 10l. To manufacture, fit up, and use refrigerating chambers, and apparatus of all kinds. The subscribers are:—P. E. Lockwood, 24, Holborn Viaduct, 100; L. Briant, Brixton, 1; B. D. Patter, North Bow, 1; T. G. Kelley, 8, Snow Hill, 1; M. Burroughs, 8, Snow Hill, 1; E. R. Southby, Hampstead, 30; K. Knott, 283, Strand, 1.

THE DARE TIN-PLATE WORKS COMPANY (Limited).—Capital 100,000l., in shares of 10l. To acquire certain buildings and lands, and carry on the business of tin-plate manufacturers. The subscribers (who take one share each) are:—J. D. Shakespear, Baron's Court; F. B. Houghton, 10, Great Benet-place; H. B. Evans, Newport; E. M. Wright, 2, Princes-street; B. Mack, 3, Finsbury Chambers; J. Shields, Islington; J. A. Paston, Enfield.

THE PATENTS DEVELOPMENT COMPANY (Limited).—Capital 20,000l., in shares of 5l. To protect, extend, and prolong the privileges conferred by any patents. The subscribers (who take one

share each) are:—W. H. Longman, Highgate; E. Johnson, 110, Cannon-street; J. Mumford, Brixton; A. S. Taylor, Brixton; R. Longman, 17, Gresham-street; A. B. Johnson, Lewisham; R. Hurts, Carshalton.

THE BILIN NATURAL MINERAL WATER COMPANY (Limited).—Capital 50,000l., in shares of 10l. To extend the importation and sale of this water and that of the Bilin Digestive Pastilles. The subscribers (who take one share each) are:—L. Repstein, 27, King-street; J. A. Partridge, 22, Lorne Gardens; W. G. Jefferys, 25, Alma-road; F. Kenworthy, Ealing; A. Twidle, 496, Southwark Park-road; H. Barton, Tollington Park; G. H. Light, Uxbridge.

PROVINCIAL STOCK AND SHARE MARKETS.

CORNISH MINE SHARE MARKET.—Mr. JOHN CARTER, mine share dealer, Camborne, May 13, writes:—Prices declined sharply early in the week, but to-day the market closes a little firmer. On the 10th inst. the tin standards were reduced 5s., making them 77s. and 78s. Closing prices herewith:—Blue Hills, 3½ to 4½; Carn Brea, 80 to 82½; Cook's Kitchen, 8½ to 9½; East Pool, 33 to 34; Mellanear, 5 to 5½; New Cook's Kitchen, 6½ to 7; North Busy, 24s. to 26s.; Penhalls, 2½ to 3; Phoenix, 5 to 5½; Pedn-an-drea, ¾ to ¾; South Condurrow, 11 to 11½; South Crofty, 14½ to 15; South Frances, 17½ to 18; Tincroft, 18½ to 19; West Basset, 18½ to 19; West Frances, 16½ to 17½; West Pever, 7 to 7½; West Seton, 22 to 24; West Tolgus, 59 to 61; West Poldice, 2½ to 2½; Wheal Agar, 6½ to 6½; Wheal Grenville, 9½ to 10; Wheal Jane, 4 to 4½; Wheal Kitty, 5½ to 5½; Wheal Pever, 28 to 29; Wheal Uny, 4 to 4½; Wheal Sisters, 3 to 3½.

—Mr. J. H. REYNOLDS, stock and share broker, Redruth (May 13), writes:—During the week the Cornish mine share market has been quiet, and lower prices prevailing, but closes to-day rather better, with more business doing at advanced rates, as subjoined:—Blue Hills, 4½ to 4½; Botallack, 22 to 24; Carn Brea, 82 to 84; Cook's Kitchen, 8½ to 9½; Dolcoath, 56 to 57; East Caradon, 3½ to 3½; East Lovell, 2 to 2½; East Pool, 33 to 34; Herodsfoot, 4 to 4½; Killfret, ¾ to ¾; Marke Valley, 2 to 2½; Mellanear, 5 to 5½; New Cook's Kitchen, 7 to 7½; North Busy, 1½ to 1½; North Herodsfoot, ¾ to ¾; North Penstruthal, 1½ to 1½; Penhalls, 2½ to 3; Penhalls United, 9 to 10; Phoenix, 5 to 5½; Penhalls, 2½ to 3; South Caradon, 12½ to 13; South Condurrow, 11 to 11½; South Crofty, 14 to 15; South Frances, 17½ to 18; St. Aubyn United, 10 to 12; Tincroft, 18½ to 19; West Basset, 18½ to 19; West Chiverton, ¾ to 1; West Frances, 16 to 17; West Kitty, 2 to 2½; West Pever, 7 to 7½; West Seton, 21 to 23; West Tolgus, 60 to 62; Wheal Agar, 6½ to 7; Wheal Basset, 4 to 4½; Wheal Crebor, 4½ to 4½; Wheal Comfort, 4½ to 4½; Wheal Grenville, 9½ to 10½; Wheal Jane, 4 to 4½; Wheal Jewell, 1 to 1½; Wheal Kitty (St. Agnes), 5½ to 5½; Wheal Pever, 28 to 29; Wheal Prussia, 1½ to 1½; Wheal Sisters, 3 to 3½; Wheal Uny, 5 to 5½.

—Mr. S. J. DAVEY, mine share dealer, Redruth (May 13), writes:—Our market has been dull during the week, with prices declining, but at the close shares are in better demand at somewhat higher quotations. The tin standards fell 5s. on Monday. Carn Brea shares fell 4½, Dolcoath 3½, East Pool 2½, South Crofty 1½, Tincroft 30s., West Frances 1½, and Wheal Pever 1½. Cook's Kitchen advanced 1½. The following are to-day's prices:—Blue Hills, 4 to 4½; Carn Brea, 82 to 84; Cook's Kitchen, 9 to 9½; Dolcoath, 56½ to 57½; East Pool, 33½ to 34½; Killfret, ¾ to ¾; Mellanear, 5 to 5½; New Cook's Kitchen, 6½ to 7½; North Busy, 2½ to 2½; Penhalls, 2½ to 3; South Condurrow, 11 to 11½; South Crofty, 14½ to 15; South Frances, 17½ to 18½; Tincroft, 18½ to 19½; West Basset, 18½ to 19; West Frances, 17½ to 17½; West Pever, 7 to 8; West Poldice, 2 to 2½; West Tolgus, 60 to 62½; West Seton, 22 to 24; Wheal Agar, 6½ to 6½; Wheal Basset, 4 to 4½; Wheal Grenville, 9½ to 10; Wheal Jane, 3½ to 4; Wheal Kitty, 5½ to 5½; Wheal Pever, 28 to 29; Wheal Prussia, 1½ to 1½; Wheal Uny, 4½ to 4½.

—Mr. M. W. BAWDEN, Liskeard (May 13), writes:—Mining market exceedingly dull and inactive, although good stock find buyers at reduced prices. Cook's Kitchen advanced to 9½; lode improved at the bottom level. Subjoined are the closing quotations:—Bedford United, ¾ to ¾; Carn Brea, 80 to 82½; Clitters, 5 to 5½; Cook's Kitchen, 8½ to 9; Dolcoath, 56 to 57; Devon Consols, 13 to 13½; East Caradon, 2½ to 3; East Pool, 32 to 33; Gawton, 1½ to 1½; Glengow Caradon, 1½ to 1½; Herodsfoot, 4 to 4½; Hington Down, 1½ to 1½; Marke Valley, 2 to 2½; Phoenix, 5 to 5½; Prince of Wales, ¾ to ¾; South Caradon, 12½ to 12½; South Crofty, 15½ to 16; South Frances, 17 to 17½; Tincroft, 18 to 18½; West Basset, 17½ to 18; West Caradon, 3 to 3½; West Mary Ann, 1½ to 1½; West Phoenix, 2½ to 3; Wheal Agar, 7 to 7½; Wheal Crebor, 4 to 4½; Wheal Pever, 27 to 28; Wheal Uny, 4½ to 5, call paid.

MANCHESTER.—Messrs. JOSEPH R. and W. P. BAINES, sharebrokers, Queen's Chambers, Market-street (May 13), write:—With the exception of the market for railways there is no general feature to notice this week, unless it may be the fact that alterations in prices are not so generally lower as they have tended during the past few weeks. A fair number of variations are noticeable, but there are very few that are at all severe. There is not much animation in the miscellaneous share market, nor is it likely there will be now till the Whitsuntide holidays are over.

BANKSHARES have not moved much in quotations, but a moderate amount of business has been done at about late quotations. The changes are 1 and ½ in National Provincial, and ditto, New, respectively, and an advance of ¼ on Manchester and Salford.

INSURANCE have not produced many dealings, nor are the variations of any great moment. They are:—Higher: Equitable Fire ¾, Lancashire and Yorkshire Accident Insurance ¾. Lower: Imperial Marine ¾, Royal (Liverpool) ¾, Queen Insurance and English and Scottish Boiler ¾ each.

COAL, IRON, AND MINING.—A rather better feeling is manifest in this class of shares, the market having lost in some measure the all round decline which had been the ruling feature for some little time back. A very fair business has been done considering the state of the trade generally, and the quotations showing advance bear a fair proportion to the aggregate of the alterations. Cammell's and John Brown's are each 2, West Cumberland 72, and Park Gate Iron ¾ higher, the adverse changes being Sheepbridge Coal and Iron 3, Thariss Sulphur and Copper, 2½, Ebbw Vale ¾, A. Knowles and Sons and Consett ¾ each, and Canadian Copper and Sulphur ¾ lower. There are a few other adverse changes, but they are fractional.

SPINNING AND MANUFACTURING shares keep very dull, and the decision of the weavers of the Blackburn district to strike for an increase of wages will doubtless have the effect of making them still heavier, but there seems signs of the strike not being a protracted one, it having been announced to the employers at some of the mills in the district that the hands are prepared to resume work on the old terms. It seems hardly probable that this will be allowed, but the spirit evinced by a portion of the hands will doubtless have its effect on the resistance of the whole as a body. Prices move downwards, but slowly, so far as list quotations are concerned; still, shares pressed for sale would not realise list prices at the present time. The prices do not relax quickly, however, owing to there being no approach to panic amongst sellers, and should a few buyers enter the market prices would, without doubt, quickly rally. As it is, however, the market is entirely without animation.

GAS, WATER, ANNUITIES, AND CORPORATION STOCK.—A rise of ¼ in Manchester Corporation Consolidated Stock (now standing at 106 to 106½) is the only movement to be noticed.

TELEGRAPHS AND MISCELLANEOUS show a very respectable list of transactions. All the alterations in telegraphs are for the better. Anglo-Americans are 2, ditto, Pref. 2, ditto, Deferred 1½, and Direct Cable ¾ higher. Manchester Carriage, A, show a few dealings at trifling reductions in prices. Manchester Carriage, A, is ¼ lower, and not much has been done in them. Rylands and Sons have moved slightly the last two days, prices being about that lately ruling. London and Manchester Plate Glass shares are ¾ higher. Bridgewater Navigation Five per cent. Pref. have been done repeatedly at between 1 and 1¼ prem. (if paid). Westhead's are offered at about late prices. Other local miscellaneous shares are fairly steady.

RAILWAYS.—Since we last reported markets have been unfavourably influenced by the approach of the settlement and a general desire to curtail open accounts. The carrying over showed railways to be heavily "bulled," and rates for continuation advanced. Caledonians, however, were the exception rate in these, falling to 2s. 6d. takers, after having been 10s. givers. This did not affect the price, and dullness was evident, until traffic gave new life to operators, and quotations advanced sharply, but for this stock advance has been lost, and they to-day close weak. In others, London and North-Western quoted New have improved 1, North British 2½. The A stock of the Southern line 1 to 3½, and others ½ to 1. Lancashire and Yorkshire fell on tidings of the cotton operatives' strike, but they have since recovered 1 on the opinion that this strike will be of short duration. In Canadians the downward movement has on the whole been successful. Several reactions occurred, but contingents were excessive, which induced many to close accounts, and with the poor traffic announced to-day (20 to 32 increase) helped to influence the "bears" to further press the market, and all the issues close, though above the worst of the day, weak and uncertain in tone. Atlantics have had one or two sharp falls, as also have Eries, Pennsylvanians, and Americans generally.

HULL.—Mr. W. FOWLER SUTTON, stock and share broker, St. Mary's Chambers (May 13), writes:—Pending the accounts, railway stocks have shown quietness as a rule, but the passenger lines exhibited considerable vitality, and both Brighton and South-Eastern, A, show advanced quotations, the general opinion being they will still go higher. Chatham also have shown more life, but move slowly. London and North-Western looks cheap, ex the new stock, and will probably recover the difference before long if buoyant markets supervene. Canadian stocks continue to fluctuate sharply, and to-day's Trunk traffic being much below expectation a smart fall resulted, but a partial rally followed, possibly on the expectation of some good reason being forthcoming for the comparative poorness of the receipts. Local stocks quiet, and prices unchanged. Hull Banks, 11½ to 12; Hull Docks, 91 to 92; Hull Tramways, ¾ to 1; Earle's Shipbuilding, 18½ to 18½; Sutton Gas, 12 to 13; British Gas, 34½ to 35½; Kingston Cotton Ten per cent. Pref., 6½ to 7½.

CHESTER.—Mr. FRANCIS FRANCIS, stock and share broker, Corn Exchange Chambers (May 13), writes:—Local market firm, with a strong upward tendency, especially in some of the principal stocks. Halkyn District Drainage shares, 10 to 11; Rhosomer, 3 to 4; Rhylalun, 10 to 10½; Pen-yr-Orsedd, 1½ to 1½; North Hendre, 6 to 7; Mwnbwl, par to ¼ prem.; Deep Level (new shares), 1 to 1½; Gwern-y-Mynydd, 5 to 5½; Pant-y-Mwyn, at par; Gorsedd, 2 to 2½. Other local mining shares stagnant. Gold Mines: Pitangui, 2½ to 3½; St. John del Rey, 200 to 210; Santa Barbara, 2 to 2½; Brazilian Gold Mines, 1 to 1½; Frontino, ¾ to ¾; Copiapo, 8½ to 9. The sale of 60 tons from Rhosomer at the Holywell ticketing to-day (20 more than was expected) keeps these shares in high estimation, with a decided upward tendency; and in sympathy with these the Halkyn District Drainage are also very strongly held, seeing that the royalty accruing from a monthly

sale at Rhosmor alone of 80 tons puts the shareholders in view of a dividend of about 5 per cent. on the stock. The driving accomplished last week was 16 yards, and the forebrest indicates a probable tapping of fresh feeds of water. In Rhylun the fine course of ore opening out in the south cross is looked upon as a leader to the main lode, which they daily expect to cut rich. Pitangui shares are tightly held pending advice from the mine as to the result of operations on the Ouro Podre find, the sample taken out of the lode producing above 28 ozs. of gold per ton. Santa Barbara shares are easier, but not unlikely to improve. The serious fall in St. John del Rey shares does not appear to be warranted by the authentic advices from Brazil.

NEWCASTLE-ON-TYNE STOCK EXCHANGE.—Messrs. SPENCE and IRWIN, stock and share brokers, Grey-street (May 13), write:—The strike in the iron trade, referred to in ours of last week, is settled, but, notwithstanding, all our local iron companies' shares remain flat. The following are offered without tempting buyers:—Bede Metal and Chemical at 2½ dis.; Bolekow, Vaughan, and Co. (60¢ paid) A shares at 18 prem.; ditto, ditto, B shares at 39½; ditto, ditto, 5 per cent. pref. shares at 20½; Consett Iron, 15 prem.; Consett Spanish Ore, 32s.; Darlington Iron, 8½ dis.; John Abbot and Co., 12 dis.; Palmer's Shipbuilding and Iron Company, A shares, 10 dis.; ditto, ditto, B shares, 10 dis.; W. & A. Cumberland Iron and Steel, 7 dis.; 2 is bid for Teesdale Iron and Engine shares, whilst there are resellers at 2½; 4 is bid for Skerne Iron shares, and at the moment there is no seller under 5. Our local mining companies' shares remain precisely the same as last week, with very little doing.

SCOTCH MINING AND INDUSTRIAL COMPANIES SHARE MARKETS.

STIRLING.—Mr. J. GRANT MACLEAN, sharebroker and ironbroker (May 13), writes:—During the past week the dull state of business generally, and want of signs of recovery of activity, combined with the approach of the fortnightly settlement, have depressed prices, but the new account for settlement on May 28 commences with a better feeling. Particulars of the continuation business are given below. There has now been such a heavy fall in prices that investments prove more tempting. The Board of Trade Returns for April show a continuance both of imports and exports; although the comparison is rendered more favourable through the depression ruling at the corresponding period last year; there is no doubt the returns indicate a satisfactory improvement in business.

In shares of coal, iron, and steel companies the movements for the week comprise advances of 10s. per share on Bolekow, Vaughan, A. and Pife Coal, while Monkland, pref., have fallen 2½ dis., Monkland, ordinary, 11s., Clyde Coal 8s., Marbella 7s., Chillingham Iron 5s., Benhar 3s. 6d., and Omoa and Cleland 1s. 6d. The pig-iron market has been steadier during the past week, from 45s. to 45s. 6d. Iron is increasing in favour as an investment at present prices, and likely to pay in the long run, although it is not quite certain that lower prices may first be seen. The market is now suffering from the over-excitement of the previous six months accumulation of stocks and demand falling off, but still there are prospects of a sounder improvement. Benhar declined from 45s. to 45s. 6d., but are now firmer, about 43s. Nerubuddas are still flat, but according to the statement at the meeting this should be an improving property. Steel Company of Scotland, also Arrol's Coal shares, are now quoted ex div., and a call of 4½ per share, making 8½ dis., is payable on Steel Company of Scotland new shares on June 1. Andrew Knowles and Sons are at 13 dis. Ashton Vale, 8; Bilbair Iron, 22½; Bolekow, Vaughan, B, 39½; ditto, stock, 133; and ditto preference, 20½; Cardiff and Swansea, 50s. to 55s.; Charles Camell and Company, 8½ dis.; Chillingham Iron, 7s. to 7s. 3d.; Clyde Coal, 50s. to 55s.; Consett Iron, 5½ prem.; Ebbw Vale, 10 to 11; Fife Coal, 7½; Great Western Colliery, B, 3s.; Hampden Colliery, 7s. 6d.; Henry Briggs, A, 13½; John Brown and Co., 8 dis.; John Brown and Sons, 19; 20s. London and Yorkshire Co-operative Coal, 60s.; Lydney and Wigpool Iron, 53s. 6d.; Monkland Iron and Coal, 47s. 6d. to 50s.; ditto, preference, 5½ to 5½; Marbella Iron, 57s.; Mywynd Iron, 47s. 6d.; Muntz's Metal, 16½; Nant-y-Glo and Blaenau Iron, 25 to 30; Newport Abercrombie, 6½ to 7; Oakham Colliery, first preference, 10s.; Omoa and Cleland, 24s. to 25s.; Parkgate Iron, 5 prem.; Pelsall Coal and Iron, 25s. 6d.; Rhymney Iron, 27s.; Shotts Iron, 85; Sandwell Park Colliery, 15; Sheepbridge, 17½ dis.; South Wales, 20s.; Steel Company of Scotland, 10 to 10½; ditto, new, 5s. 9d.; Staveley, C, 83½; Thorp's Gwawr Hall, 30s. to 40s.; Tredegar, B, 36; and West Cumberland, 6½ dis.

In shares of foreign copper and lead companies Rio Tinto has improved 2s. 6d. per share, but Tharsis have declined 25s. Cape, 11; Huntington, 10s.; Panulicillo, 7s. 6d.; and Canadian, 3s. 6d. Tharsis fell from 31½ to 28½ on expectation of a less dividend being paid, but have now recovered to about 30. Amalamos, 32s. 6d.; Copiapo, 9½; English and Australian, 30s.; New Quebec, 73s. 9d.; Pieschette, 21; Pontigbald, 21; Rio Tinto Five per Cent., 98; Virreter, 35s. to 40s.; York, 25s.; and ditto, 20s. to 25s.

In shares of home mines prices generally are lower. Glasgow Caradon are 5s. lower, and the new shares 4s. lower. Business has been done in the former from 27s. to 24s., and in the latter from 15s. to 14s. The next sale of copper ore by this company will be 150 tons, which compares with 160 tons last month, while the rates in the month of May for several years past have been from 190 to 250 tons. Tin shares are depressed, owing to a fall of 5¢ in the standards. Aberdunians are at 1s. 6d.; Belahuan, 6s.; Bedford United, 14s. to 15s.; Bestwya-y-Coed, 17s. 2d.; Cam Brea, 85; Devon, Great Consols, 13½; Dolcoath, 58; East Crebwr, 20s. to 22s.; East Roman Gravel, 12s. to 14s.; East Chiverton, 25s. to 30s.; East Caradon, 62s. 6d.; Gunislake (Clitters), 5 to 5½; Groegwylan, 57s. 6d.; Great Laxey, 18½; Killaloe, 9s. 6d.; Levant, 12½; Lady Bertha, 4s. 6d.; Lady Ashburton, 20s.; Llannwrst, 25s.; Marke Valley, 40s.; Mid-Devon, 3s.; Mellanear, 5s.; Mining of Ireland, 59s. 6d.; New Kitty, 25s.; North Bus, 30s. to 35s.; New Peveor, 62s. 6d.; North Molton, 14s.; Old Gunislake, 12s. to 14s.; Parys Copper, 22s. 6d. to 27s. 6d.; Parys, 50s.; Prince of Wales, 15s. to 17s. 6d.; Prince Patrick (pref.), 30s.; Rhyman Gravel, 10½; South D'Eresby, 20s.; South Darren, 65s.; South Cambrian, 3s. 6d.; South Crebwr, 17s. 6d.; South Condurrow, 11½; Tankerville, 15; Tincroft, 19; Van, 19½; Van Consols, 15s.; West Phoenix, 52s. 6d.; West Seton, 26; West Chiverton, 15s. 9d.; West Basset, 19; West Devon Great Consols, 70s.; West Kitty, 30s. to 35s.; West Pateley, 15s.; Wicklow Copper, 8s. 6d. to 7s. 6d.; Wheel Ovals, 8; Wheel Crebwr, 80s.; and Wheel Frances, 17.

In shares of gold and silver mines Richmonds, which are now quoted ex div., are firmer. This week's run has been 865,000. The next dividend on St. John del Rey will, it is expected, be the same as before—25 per cent., and one of the directors is going out to Brazil to agitate for the alteration of the 4 per cent. tax imposed by the Provincial Government. Placerville Quartz Company has crushed 700 tons, yielding \$7300. Mine reported to be improving. The profit at Sierra Buttes for April has been \$6241, and at Plumas Eureka \$20,623. The Gold Company of Southern India have secured two freehold estates, comprising 900 acres in the heart of the gold-bearing regions. Almadia, 11s. 3d.; Australasian Mines, 5s.; Colorado, 47s. 6d.; Consolidated, 15s. 3d. to 18s. 6d.; Don Pedro, 16s. 3d.; Emma, 7s. 6d. to 12s. 6d.; Exchequer, 5s. to 10s.; Eborhard, 81s. 3d.; Flagstaff, 30s.; Frontino, 77s. 6d.; Glenrock Gold, 23s. 9d. to 30s.; I.X.L., 5s. to 10s.; Javali, 5s. to 7s. 6d.; Last Chance, 5s.; New Zealand Kapanga, 22s. 6d. to 27s. 6d.; Pestarena, 5s. to 7s. 6d.; Port Phillip, 10s. to 12s.; Rio Grande, 50s.; Rossa Grande, 3s. 9d.; Santa Barbara, 33s. to 40s. ex div.; and Teocoma, 3s. 9d. to 5s.

In shares of oil companies Young's Paraffin are 2s. 6d. better, but Broxburn have declined 12s. 6d.; Uphall, 10s.; and Oakbank, new, 6d. Young's Paraffin touched 10½, but have since improved to 10½. Runcorn Soap and Alkali not offered, no buyers.

In shares of miscellaneous companies business continues dull. Avonide Engine are at 47s. 6d. dis.; Droitwich Salt (pref.), 20s.; Milner's Safe, 9; Native Guano, 5; Neuchatel Asphalt, 12s. 6d. to 15s.; Phospho-Guano, 4½ to 5; and Val de Travers Asphalt, 8. Prices of wagon companies shares are—Birmingham, 15½; Bristol and South Wales, 47s. 6d. prem.; Bristol, 30s. dis.; Gloucester, 9½; The Newport, 10s. 6d.; Railway, 11½; Railway Bridge, 9s.; Railway Rolling Stock, 7½; Swansea, 65s.; United States Rolling Stock, 19 to 20; and Western, 65s. Prices of chemical companies shares are—Langdale's 60s.; Lawe's, 5½ to 8; and Newcastle, 95s.

THE PATENT DYNAMITE FUSE COMPANY.—Nearly everything around us has undergone rapid changes within a comparatively short time, and amongst other things blasting compounds have made rapid progress, whereby gunpowder is being superseded in a very marked degree by dynamite and other explosives. Although sold at 200¢ per ton, the amount of work done is so satisfactory that even at that high price it is being more and more called into requisition by its extraordinary results. There is one thing, paramount importance in connection with blasting dynamite the want of which has caused many sudden explosions, the uncertainty of the old fuse and the clumsy method by which it is attached to the detonator, sometimes hanging fire for a considerable time, the consequences proving fatal to the workmen. No uncertain misfiring can take place by the new patent, and the fuse being metallic cannot hang fire, but must either explode or go out. The fuse being inserted in the detonator perfectly water-tight, and made ready for use in whatever lengths the miner wishes, there is no trouble or risks. Another advantage is that there is no loss of time in waiting upon misfired holes, especially where many men are employed and working close to each other, and where boring machines are also hindered, as well as quarries, &c., where sudden explosions would be attended with awful consequences. This patent also provides for blasting by the electric spark. We have in this patent arrangement as near as possible a perfect safety dynamite fuse, being impervious and unflammable, uniform and certain in action, will not deteriorate in any climate nor spoil from damp while in stock, and may be submerged in water for any length of time without injury. A company has been formed to undertake the manufacture of this fuse on a large scale, and the profits are estimated at an extra high percentage. There is scarcely a concern in this country equal to the Patent Dynamite Fuse enterprise, as it only requires energy to ensure success.

FLAGSTAFF SILVER MINING COMPANY OF UTAH (Limited).—The directors of this company have issued a circular, intimating that the statements made by the late secretary—such as that nothing could be done to preserve or resuscitate the present company—are false and erroneous, and cautioning the shareholders to be aware of attempts to depreciate their property by unprincipled people (they believe that upon a re-hearing of the title case the company would become clearly and permanently repossessed of its property, and steps have been actually proceeded with for this purpose). Of course in the event of parties at present claiming possession relinquishing the property on equitable terms, as is fully anticipated, further delay and costs of litigation would be avoided. The Syndicate has made considerable progress, and has paid up a large sum of money in connection with the formation of a new company. The board of the present company has been strengthened by the election of three additional members largely interested in its fortune.

BROXBURN OIL COMPANY (Limited).—The third annual report of this company states the net profit after providing for depreciation and all charges is 42,117. The dividend of 25 per cent. absorbs 37,500¢, leaving 4617. to add to reserve, which then amounts to 6482. The amount written off revenue for maintenance is 14,972.

The whole stock in trade is taken into the balance at cost prices. The works are now capable of distilling and refining into all the various products 135,000 tons of shale per annum. During last year the expenditure on new plant was 20,761. The estimate for the current half-year is 10,000. The company makes 140 tons of solid paraffin monthly, and as the number of buyers for it is small, and their requirements as to quality onerous, the directors decided to refine the greater portion, and if needs be manufacture the same into candles. This is the only article produced at the works not hitherto finished ready for consumption. It has been resolved to erect plant for the collection of gasoline. A number of bores put down during the year showed a larger unwrought field to the east of the works than had previously been anticipated, and will render the sinking of any new pit unnecessary for some time.

INDIAN QUEEN CHINA-CLAY COMPANY (Limited).—A company has been formed under this name to acquire and work the available china-clay works and property known as Gaveriga, on the estate of that name, in the parish of St. Columb, Cornwall. The works are well situated for railway carriage to the various ports of the county. The property extends to over 50 acres, and is mostly proved to contain china-clay of first rate quality for potteries and bleaching properties. Many thousands could be raised from the pit now open, and it is estimated the profits will be 35 per cent. The shares are 1¢ each.

UPHALL OIL COMPANY (Limited).—This company's annual reports states that the stocks have been valued at the reduced valuation, amounting to 2450¢. Operations have been commenced for the erection of 96 of Henderson's patent retorts at Uphall, which will form an addition to the producing power of company equivalent to one-third more, or a total producing capacity of 4,000,000 tons of crude oil annually. Shareholders are to be asked to increase the company's borrowing powers to 25,000¢, from 30,000¢, to meet the prospective capital expenditure. The company are also issuing debentures for one year at 5 per cent. interest, for two years at 5½ per cent., and for three years or upwards at 6 per cent.

On Contango-day the following were the rates of continuation current:—Contango: 5d. on Benhar Coal; 6d. 5½d. 5d. on Canadian Copper; 2d. 1d., even, 1d. on Clyde Coal; 2d. on Don Pedro; 3d. on East Chiverton; 2½d. on Caradon; 1½d. 2d. on Caradon new; 4d. 6d. on Glasgow Port Washington; 1s. on Gunnislake (Clitters); 8½d. 6d. on Huntington; 3d. 2½d. on Marbella; 5d. 5½d. 5d. on Monkland Iron—5d. on preference; 3d. on Parys Copper; 6d. on Port Nigel; 3d. on North Herodasfoot; 3d. on New Zealand Kapanga; 2d. on Neuchatel Asphalt; 2d. on North Molton; 10½d. on Richmond Mine; 1s. 6d. on Roman Gravel; 6d. on South Indian Gold; 1s. 10½d. on Steel Company—3d. on new; 3s. 2d. 9d. 3s. 3d. on Tharsis; 2s. 1s. 6d. on Broxburn; 2d. on Omoa; 7½d. on Panulicillo; 7s. 6d. on Shotts; 1s. 3d. on India-Rubber; 6d. on Flagstaff; 1s. 6d. on United States Rolling Stock; 9d. on West Caradon; 6d. on West Kitty; 3d. on Wheel Jewell; 2d. on Wicklow Copper.—Backwardations: Even, 6d. on Rio Tinto; even, 3d. on Uphall; even on Young's Paraffin. On comparing the making-up prices fixed to-day for the undermentioned shares with those current at last settlement for the same shares the variations thus shown to have taken place during the account are as follows:—Tharsis have declined 37s. 6d. per share; Broxburn Oil, 22s. 6d.; Flagstaff and Panulicillo, each 10s.; India-Rubber, 8s. 9d.; Monkland Iron and Coal, 8s. 6d.; Canadian Copper, 8s.; Clyde Coal, Monkland (preference), Rio Tinto (shares), and Young's Paraffin, each 7s. 6d.; Glasgow Port Washington, 5s. 6d.; Glasgow Caradon, 4s. 6d.; Benhar, 4s.; Uphall Oil, 3s. 9d.; Glasgow Caradon (new), 3s.; Huntington Copper, 2s.; Marbella Iron and Omoa and Cleland, each 1s.; and Oakbank Oil, 6d. On the other hand, Richmond have advanced 2s. 6d. per share; Steel Company of Scotland (new), 1s. 3d. The remainder do not show any alteration—Shotts Iron, Steel Company of Scotland, and United States Rolling Stock.

OLD GUNSLAKE MINE.—An important discovery is said to have been made at this property in clearing an old lode. The agents considered that it had only been carried on one side, and put men on to cut into the side level, where they discovered a fine lode of rich yellow ore still standing. The lode is thought to be a continuation of the Clitters lode eastward.

EDINBURGH.—Messrs. THOMAS MILLER and SONS, stock and share-brokers, Princes-street (May 13) write:—Within the last week Bank of Scotland has risen from 290 to 300, and National Bank from 265 to 267. The quotations of the other banks are unaltered, but the market is steady. Mining shares have been weak. Benhar has declined from 48s. to 42s., Clyde Coal from 58s. 6d. to 50s., Glasgow Caradon from 30s. to 24s., Huntington from 80s. to 65s., Marbella from 64s. to 57s. 6d., Monkland from 57s. to 45s., and Tharsis from 30½ to 27½. Fife Coal has risen from 7 to 7½.

IRISH MINING AND MISCELLANEOUS COMPANIES' SHARE MARKET.

DUBLIN, MAY 13.—The general appearance of our markets is very encouraging, and mine shares have enjoyed their full share of improvement. In banks there has been a considerable amount of business doing, and nearly all classes of securities have been fairly active. There has been a moderate number of transactions in Mining Company of Ireland at 2½½ to 3, and Wicklow Copper have recovered to 3½, at which a fair amount of business has been done. Although there is comparatively little doing in tramways, prices are decidedly better, and the same may be said of gas shares. Alliance Gas have advanced to 17½; Arncliffe have been steady at 6½; Gouldings at 8½½; McSwineys at 8; McKenzies at 13½. Rails are rather dull, but Midland Great Western have been in request at an advance, the transactions having taken place at 98. Altogether, the aspect of the market is encouraging.

CORK.—Messrs. J. H. CARROLL and SONS, stock and share brokers, South Mall (May 12), write:—There has been a considerable rise during the past week in most stocks, especially rails. Great Southern and Western were at one time as high as 118½ to 118½, but receded to 117½. Midlands advanced to 97½, 98; and Bandon to 97. Passages remain 11½ to 11½; National Banks have risen to 65½; Provincials were done at 65 to 65½; Munsters firm at 7½, and the new shares, now fully paid, at 6½. Cork Steam Packets in demand at 12½ to 12½. Levys were done at 6½ to 8½; Gouldings unchanged at 8½ to 9; and gas shares about 7½. Gresham Hotel shares changed hands freely at 3½.

WATSON BROTHERS' MINING CIRCULAR.

WATSON BROTHERS,
MINEOWNERS, STOCK AND SHARE DEALERS, &c
1, ST. MICHAEL'S ALLEY, CORNHILL, LONDON.

Ten years ago the weekly information which had previously been published for a great number of years in WATSON BROTHERS' Mining Circular was transferred to the columns of the *Mining Journal*, with the following announcement; which is now reproduced in consequence of the numerous letters and enquiries handed to them of late in reply to one which appeared in the *Journal* on the Clementina Mine.

If any of our readers have the curiosity to turn to the pages of the *Mining Journal* for the month of May, 1861, they will find that on the 1st of that month we were sitting on the edge of a sawpit on the summit of Carn Camborne. Our remarks on that occasion were quoted by the Press far and wide, for they described not only a delightful view but a sketch of the surrounding mines which had yielded tin and copper to the value of 40,000,000¢ sterling. We stated that Dolcoath had been worked for 120 years and Cook's Kitchen 100 years. The former from 10 fms. deep to the 160 was rich for copper; from the 160 to the 190 copper and tin mixed (during the transition and poor state), and from the 190 tin only. The profit on copper was 600,000¢. Cook's Kitchen had returned 2,000,000¢ sterling. But our object in referring to the "Cornish Notes" of that period is not to go into all these details, which are open to any one who will seek them in the pages of the *Journal*, but to refer to the fact that we visited Carn Camborne Mine with the Chairman of East Caradon (Mr. Fawcett) and the manager (Capt. Secombe), and upon an inspection of Carn Camborne these gentlemen joined us in working the mine, and it was managed by them at Salisbury, until it was eventually abandoned under a heavy loss, and the company was wound-up, owing, we believe, to the shareholders, as they had once done in East Caradon, getting tired out by calls, and refusing to go on. We had, and we still have, a high opinion of the sett, and believe that depth and a good outlay will eventually result in success. And what is more we should be glad to see it, though we have now no interest in the mine; but we cannot agree with some writers in the *Journal* of last week that the failure of the last company was owing to bad management. Capt. Secombe and those under him were not the men to "drive levels anywhere but where they were likely to find the lode." They did find the lode, and made large returns of ore, but never sufficient to pay, and it is not only possible but highly probable that in such a district greater depth and a larger outlay would have rewarded them.

East Roman Gravel is in 30,000 shares of 1¢ each, of which 9000 are 6 per cent. preference and 6000 are held in reserve. Without reference to these the available capital is nearly 3000¢, and the mine is paying its way and looking well.

D'Eresby Mountain has sold 20 tons of lead ore at 9¢ 13s. per ton. This shows a great fall in the price of lead.

Clementina has also sold 10 tons of ore at 9¢ 13s. per ton.

In the valley cross-cut at Aberllyn the agent thinks the lode is not far off; there are good stones of lead in the joints, and branches of spar in the end. At No. 1 level a nice branch of lead has been met with.

The great fall in metals this week has made everything flat, and sellers can only do so at a sacrifice.

It used to be considered that if a shareholder in a Cost-book mine transferred his shares to a man of straw in order to avoid his proportion of liability he could still be made to pay in case of a winding-up. Thus, when Wheel Unity Wood was wound up it appeared that 500 shares had been transferred from a responsible party to a man of straw for a nominal consideration. The liquidator, acting upon the construction he put upon the 35th section of the Stannaries Act, which provides that shares in a mining company cannot be transferred to a person without means and for a nominal consideration in order to avoid liability, placed the transferee on the list of contributories, and this was confirmed by the Vice-Warden. The transferee appealed to the Lords Justices, and the case came on for hearing a few days ago, when Lords Justices James, Baggallay, and Bramwell allowed the appeal, and thus reversed the decision of the Vice-Warden. They appear to have done so on the facts—(1) That the Company had registered the transfer, and had made calls upon and sued the transferee; and (2) by this conduct they had ratified the transfer to a man of straw.

It will be necessary after this ruling for pursers and secretaries of Cost-book mines to be extremely careful in taking transfers and ratifying them in poor and calling concerns.

We have heard it said that the mistake was made in suing the man of straw in the first instance; but how is the pursuer or liquidator, as the case may be, to ascertain a man's real position without proceedings?

Meetings of Public Companies.

NATIONAL PROVINCIAL BANK OF ENGLAND.

The annual general meeting was held at the Bank, Bishopsgate-street, on Thursday.—Mr. RICHARD BLANEY WADE in the chair.

The following is an extract from the report of the directors:—"There were five changes in the published rate of the Bank of England during the year, giving an average rate of 2¢ 10s. 2d. as against 3¢ 15s. 7d. for the year 1878. This reduction in the value of money, together with the general depression in trade, has very materially affected banking profits. The result of the year's operations enables the directors to recommend—that the dividend and bonus now to be declared be 10 per cent. for the half-year, being the usual 4 per cent. dividend, with a bonus of 6 per cent., making, with the distribution in January last, 19 per cent. for the year, leaving a balance of 21,757.4s. 9d. of undivided profits to be carried forward to the account for the current year."

The CHAIRMAN said: Gentlemen, when I had the pleasure of meeting you last year I thought it due not only to you but to ourselves to go into considerable detail as to the items which compose our balance-sheet, and to explain very clearly indeed the rules and principles upon which we carry on our banking business, but I do not think to-day it is necessary to repeat or go over that ground again; but I will, if you will allow me, draw your attention to the difference in the different items in the balance-sheet to-day compared with the report which we presented last year. You will find that the paid-up capital of the bank, and also the reserve fund—that the amounts standing to those two items have increased by 55,232¢, which, of course, represents the amount by calls, and also the premium upon the new shares, which were issued last July. You will find that the deposits, which now amount to 27,796,114¢, have increased by 1,865,321¢, which is a satisfactory proof I think of the estimation in which the bank is held, and the credit which it enjoys. (Cheers.) The acceptances are 266,459¢ less than they were in the account we presented last year. The amount must of necessity vary from time to time, but we continue to adopt the same policy of keeping these at a very moderate amount indeed. If you look at the other side of the account—the assets—you will find that in cash we had 1,158,897¢ more than on the previous occasion. Our Government securities also show an increase of 712,407¢. It is needless to point out to you the great strength of the position of the bank which these figures represent. The Indian Government and other securities, debentures, &c., show a somewhat smaller amount by 71,317¢. I will if you please take the banking premises next, which show an increase of 31,139¢. That is an amount which is unfortunately sometimes misunderstood, and it is as well, perhaps, to repeat that the amount really expended upon buildings is 749,354¢, and against that we really have two assets—the building in which the business of the bank is carried on both in London and in the country, and we also have a depreciation value, which is invested in securities amounting to 175,324¢; so I may say, as I have often said, a better asset does not exist in our accounts. We then come back to the money advanced to our customers in the shape of advances and discounts—16,813,060¢—which shows a reduction compared with last year of 450,840¢. But this, of course, does not show the total reduction of the advances and discounts which our customers really got off during the year. During the year 1879 our friends who deal with us paid off, in one way or another, very nearly 2½ millions of money. The greater part of that amount was invested in commercial bills, which we took from the London brokers, so that the total amount in that line does not seem to be very much less. From one point of view it is, no doubt, very satisfactory to find that the moment the panic wave, as one may call it, passed over the country last year, and trade became almost stagnant, our friends in the country, who deal with us, found they could no longer employ their money to advantage, but considerably reduced the amount of overdrafts, and brought us fewer bills to discount. I think nothing could prove better the thoroughly sound condition in which our business existed. From one point of view I have said it is satisfactory; but from another point of view it is not so satisfactory, for of course that entailed a considerable reduction in the banking profits of the year. This money, which was earning 4 or 5 per cent., had to be invested in brokers' bills, sometimes as low as 1 per cent. per annum, and even lower than that, which, of course, greatly curtailed the amount of the profit of the bank; added to this, as you probably know, the average value of money was 25s. less per cent. than in the preceding year, when we all thought it very low indeed. Of course that reduction in the value of money affected our general business, and also affected profits we derived from the considerable sum of money which we are obliged to keep at call and at short notice. When you consider all these things which I have mentioned, I think you will agree with me in thinking that we have been fortunate in a year when everything tended to reduce profits, that we have been fortunate enough to earn a dividend and bonus amounting together to 19 per cent. for the year. (Cheers.) A gradual improvement, I need not say, but I believe sure, has taken place in the commercial condition of the country this year. A somewhat improved demand for money has taken place in the country, and we firmly believe that if the country should be blessed with a good harvest, of which up to the present moment seems every probability, we shall have a very good account to give you when we meet next year. (Cheers.) You must not conclude from what I have said that we have suffered in any way whatever, except from the reasons which I have stated, or that we have lost any of our customers; on the contrary, you will find from the report that the number of our customers has considerably increased, and it is most gratifying to state these things from tiny details of the way in which this continued growth of our business, and also to learn that the various arrangements we have made for increasing the paid-up capital of the bank, and also providing ample reserve liability, has met with the approbation both of the shareholders and customers. Week after week we are acquiring shareholders of considerable wealth and position, both in London and in the country, who not only will strengthen the constituency of the bank, but who will, I doubt not, ere long bring us new business. (Cheers.) Since we met you last month, when you passed a resolution and gave us power to register the bank as a limited company, we have sent out a great number of legal notices to customers in different parts of the country, and on all hands we hear of approbation of the step which we have taken to limit the liability of the bank. It is as well to state once more that when these arrangements are carried out the paid-up capital of the bank will amount to 2,227,500¢, the uncalled will be represented by 1,785,000¢, and there will be a reserve liability of 8,025,000¢, making the subscribed capital of the bank 12,037,000¢, and in addition to this there is a reserve fund, all of which will be invested in Government securities, amounting to 1,380,000¢. (Cheers.) Now, gentlemen, I cannot bring my remarks to a close without hearing willing and hearty testimony to the manner in which the staff, both in London and in the country, have conducted the business of the bank during the past year. Without a very efficient staff indeed, I need not tell you that it would be very difficult indeed to conduct the business of the bank and bring it to a successful issue; but we continue to find every officer, whether at the country branches or in the departments in this house, doing their very best to promote the interests of the bank with which they are connected. We have still the valuable assistance of our three old and well-tried friends and general managers, Mr. Holt, Mr. Ferguson, and Mr. Robinson, and it would be difficult for me to convey to your minds the great assistance they are to us in performing our duties here. Early and late these gentlemen are at their posts, showing an ability, and I may say a patience, in dealing with the affairs of the bank which is worthy of all commendation. In conclusion the Chairman moved the adoption of the report and accounts, and said he should be happy to answer any questions.—Mr. J. OLIVER HANCOCK seconded the resolution.

Mr. REEVES warmly congratulated the directors on the very successful and gratifying report which they were able to submit to the meeting on the present occasion. They must also be extremely gratified at the way in which the new shares had been sold and the proceeds dealt with. He also congratulated the board on the successful manner in which they had carried out the important and desirable step of reducing the liability on the shares, and he thanked the board for making the payment of the instalments on the new shares extend till the year 1885, instead of compressing the payments into a smaller period, which might have necessitated some of the shareholders parting with their shares.

The dividend was more than he expected, and on the whole a more gratifying report could not have been presented to the shareholders.

A SHAREHOLDER, whilst expressing his deep satisfaction with the accounts, and with the dividend proposed, said he hoped the directors would not increase the amount of the bank in Indian securities.

Mr. REEVES said he differed from the last observation. Indian securities were never better, except for the paltry little mistake of about 4,000,000. (Great laughter.)

The CHAIRMAN, after acknowledging the kind remark of Mr. Reeves, said he fully agreed with the gentleman concerning the Limited Liability Act of last session, which enabled this bank to do everything it wanted. No doubt some of the banks had not seen their way to adopt it, but the fact remained that 28 out of 60 had adopted it, or were about to do so, and he believed the step which this bank had taken in that respect was not only good for the bank itself, but useful for the banking interest in general. As regarded Indian securities, that was a matter on which there might well be a difference of opinion, but the shareholders might rest assured of this, that the board would not hesitate to reduce the amount of Indian securities if they considered it advisable to do so. (Hear, hear.)

The resolution was put and carried. The retiring directors, the hon. Elliot Thomas Yorke, R. Wigram, Esq., and Charles Barclay, Esq., were re-elected.

The CHAIRMAN said that under the Act limiting the liability of the bank, it was necessary that two auditors should be appointed. The board had carefully considered the point, and had come to the conclusion that it was desirable to have gentlemen who were professional auditors. Without wishing in any way to influence the decision of the shareholders, the directors suggested that Mr. J. W. Waterhouse (Messrs. Price, Waterhouse and Co.) and Mr. Roderick Mackay (Messrs. Mackay and Co.) were gentlemen who from their experience and known position were well calculated to fill the position of auditors.

On the motion of Mr. AUSTIN, seconded by Mr. TOWNSEND, the gentlemen mentioned by the Chairman—namely, Mr. Edwin Waterhouse, and Mr. R. Mackay, were appointed auditors of the company.

On the motion of Mr. R. BEYER, a cordial vote of thanks was passed to the Chairman and directors.

The CHAIRMAN acknowledged the compliment.

On the motion of Mr. REEVES, a hearty vote of thanks was passed to the joint general managers, the branch managers, and the staff, for their efficient services.

Mr. W. HOLT, one of the joint general managers, acknowledged the compliment, and expressed his belief that never in the history of the bank did it possess a more efficient staff; and he would go further and say that he did not think the feeling of loyalty and devotion on the part of the officers was ever higher than at the present time.

A special vote of thanks to the Chairman for his conduct in the chair concluded the proceedings.

SOUTH INDIAN GOLD MINING COMPANY.—An extraordinary general meeting of shareholders was held yesterday at the offices of the company, Queen Victoria-street, at which the resolution adopted at the meeting of April 16 was unanimously confirmed.

RICHMOND CONSOLIDATED MINING COMPANY.

The report of the directors, prepared for presentation at the meeting on May 25, submits the statement of accounts and balance-sheet for the year ending Feb. 29. These show that the mining profit for the year is 143,063. 5s. 11d., and the net profit 134,511. 15s. 4d., or as nearly as possible 50 per cent. on the total capital of the company. Out of this, and the balance of 19,519. 3s. 4d. brought forward from last year's account, the directors have paid three dividends of 7s. 6d. each, amounting together to 60,750. 10s. 2d. legal expenses, at Eureka, in connection with the defence of the mine, leaving a balance to the credit of revenue account of 91,856. 8s. 6d.

The directors propose that out of this balance 44,416. 3s. 10d. should be carried to reserve for contingencies and working capital, bringing up that account to 50,000; that an additional dividend of 10s. per share, amounting to 27,000, be paid forthwith, and that the balance of 20,460. 5s. 8d. be carried forward to next account. During the year 43,312 tons of ore have been smelted by the two large furnaces, of which 34,371 tons were raised from the Richmond Mine and 8941 tons purchased, yielding (with 299 tons of flue dust and debris removed from the foundations of the old furnaces) 26,152 ozs. of gold, 942,294 ozs. of silver, and 8172 tons of lead. In addition, furnace No. 4, which is working in connection with the refinery, has reduced (with the drosses from the refinery) 488 tons of low grade Richmond ore, and 4228 tons of purchased ore, yielding 403 ozs. of gold, 166,630 ozs. of silver, and 1264 tons of lead. The total production for the year from all the furnaces is consequently 31,015 ozs. of gold, 1,108,924 ozs. of silver, and 9436 tons of lead.

The gold, silver, and lead sold realised 424,126. 1s. and the estimated net value of the bullion in transit and at the works was 162,249. 13s. 1d.—together making the sum of 586,375. 13s. 1d.—from which has to be deducted the value of the bullion in hand Feb. 28, 1879, then estimated at 68,701. 12s. 6d., and 82,202. 4s. 11d. paid for separating, refining, freights, commission, brokerage, and other marketing expenses, leaving 455,471. 15s. 8d. as the net value at Eureka of the bullion produced in the year. The cost of mining, smelting, purchased ore, renewals, repairs, and all other working and general expenses at Eureka being the sum of 232,471. 17s. 5d., the profit for the year on mining, smelting, and refining is, with 63s. 7s. 8d. received for sundries, 143,063. 5s. 11d.

The mining and hauling expenses were 111.02 per ton, as compared with 81.18 in the previous year. The smelting expenses, including labour, fuel, stores, and renewals, were 81.15 per ton, as against 81.29 in the previous year. The bullion has realised about 79½ per cent. of the Eureka standard assay value, as against 69½ per cent. last year. This increase is attributable to the rise in lead, which at the beginning of the year was 3s. 6d. per lb., or 12½ per ton, but afterwards rose to 5½s. cents, of 22½ per ton. Silver has fluctuated very little in price during the year.

For the first time in the history of the company smelting operations have been carried on continuously throughout the whole year. The two large furnaces have been doing excellent work, each smelting on an average from 80 to 85 tons daily. The total quantity smelted in all the furnaces is 52,519 tons, or over 1900 tons per week all the year round. The ore has not been of such high grade as last year, the Richmond ore assaying only 86.12 per ton, as against 97.98 last year. The yield per ton of ore (Richmond and purchased) has been 85.53, as against 87.86 last year. The ore smelted with litharge and drosses from the refinery is low grade and refractory, and cannot be smelted to advantage with the ordinary ore in the general furnaces, but by means of admixture with the litharge and drosses it can be smelted at a profit. The bullion from this furnace is not included in the ordinary smelting returns cable over weekly.

The refinery has been working well throughout the year, and has contributed largely to the profits; it has treated the whole of the bullion produced, no crude bullion having been sent forward for separation elsewhere: the expenses have been reduced from 81s to 81s.28 per ton by the use of larger crystallising and melting pots and other improvements introduced by Mr. Probert. The buildings, furnaces, refinery, steam-engines, hoisting apparatus, and machinery of every description have been thoroughly maintained, 12,702. 2s. 4d. having been expended on repairs and renewals during the year. A large amount of exploratory work has been done during the year, and the mine never looked better than it does at present, nor have there at any time been such large bodies of ore opened up.

THE WEEK.

SATURDAY, MAY 8.—Trunks were a good market, it being understood that the competing company—Great Western of Canada—are now anxious for the "common purse" agreement. Both the Ordinary and the Third Preference advanced 1½, prices being 23 and 43 respectively. The First reached 87½, and the Second 74. Great Western shares could be bought at 13½, and are not unworthy of attention at this price. Home railways were neglected, except in the case of Brighton, A., which finished strong at 159. Brighton Aquarium shares, 5½ to 6; National Safe, 5 to 5½; Calceolaria and North British had a further rally, considerably firmer, the low prices touched by Erie and Atlantic Mortgage Bonds tempting buyers.

MONDAY.—Selling was renewed in the American market. Erie shares went to 29½, and Atlantic Firsts to 71½; Reading shares being 23, and Pennsylvania, 25. Trunks were largely dealt in, and maintained quotations, the Firsts being 87½; Second, 74½; and Third, 43. Owing to this being the last day of the present account very little was done in home railways. Great Eastern was the best market, and rose ¼ per cent. By liberal tariff this company has acquired an enormous business, and arrangements have now been made for delivery in town of sea water at a purely nominal rate—8d. for every three gallons.

TUESDAY.—A semi-panic prevailed in the American market. Erie shares fell 2½, the preference 3½, and the second mortgage 3½, prices closing 83½ to 83½, 60 to 65, and 88½ to 89 respectively. At one time Atlantic First Mortgage was selling at 69½, and this was the carrying over price; but towards the close there was a rally to 71. Central of New Jersey were quoted 5½ lower, and Reading shares 82½. In home railways contangoes ruled to high that stock had to be sold. Metropolitan District fell 1½, and Caledonian and York, A., 1 each. A fall in tin made the market all sellers, very few shares changing hands, however. St. John del Rey quoted 10 lower.

WEDNESDAY.—The American market was in much healthier condition, and prices materially recovered. Erie Second Mortgage improved 1½, and the Ordinary shares 3½. Atlantic Leased, 1873, were quoted 1½ better, at 47 to 50. Illinois Central rose 81. Home railways were at first offered, but just before the close a material advance took place in several. Caledonian rose rapidly from 108½ to 109½; Dover, A., advanced 1½, to 13½; Egyptian State Domain closed 1½ better, being 97, and the Preference rose 1½; Farva Corporation, 1½ to 1½; Wheel Crebros, 3½ to 4½; Don Pedro, ¾ to ¾; North British advanced from 75½ to 76½; Panuclillo, 3½ to 4.

THURSDAY.—The mid-monthly settlement was finally concluded to-day. It is some time since a retrograde movement has had to be reported in Grand Trunks. The principal fall has been in the Second Preference, from 77 to 74½. The Atlantic First during the same period have gone down from 74 to 69½, and the Second from 36½ to 32½. Reading shares ran down from 84 to 82½, and Erie shares from 84 to 82½. Caledonian and North British had a further rally, a material advance taking place in the Brighton, A., and Dover, A. Trunks were pressed for sale, owing to an indifferent traffic return.

FRIDAY (Opening).—With the exception of Brighton, A., which has reached 159, prices are nearly all lower than last night. Dover, A., are ¾ down, and British and Berwick 4½. Trunks are again flat, the Second being offered at 71½, and the Third at 41. The American market is again in a disorganised condition, owing to the renewal of operations for a fall at New York. Erie are only 33; Atlantic First Mortgage, 70½; Pennsylvania shares, 25. Egyptian United is being sold at 59½; Wheel Crebros, 3½ to 4½; Polaris, 1½ to 1½; Farva Corporation, 1½ to 1½; Santa Barbara, 2 to 2½; Prince of Wales, ¾ to ¾; East Crebros, ¾ to 1; Tankerville, 4½ to 5. Two o'clock.—All the markets are flat without exception. York, A., has fallen 1 per cent., and Dover, A., now shows a fall of 1½; Caledonian has receded to 108; North British to 77. Trunk Thirds are now

down to 40, equal to a fall of 1½; Atlantic Firsts have receded to 69, and the Second to 32.—Four o'clock.—Results of the working at the Sierra Buttes and Plumas Eureka Mines for April:—Sierra Buttes: Total receipts, \$27,072; total working expenses, \$20,831.—Plumas Eureka: Total receipts, \$43,325; total working expenses, \$21,703. No sulphurets were worked during the month.

LONDON AND CALIFORNIA.—The clean-up at the Original Amador Mine for the month of April is estimated at \$1636.

ALMADA AND TRITO CONSOLIDATED.—Telegram from Mr. Clemes, April 23: I have remitted you ore and bullion, \$4400. The sum total of produce account credits, including ores and bullion, from the 1st of the current year to date is \$63,000.

PLACERVILLE (Cablegram).—T. Price, May 10: "700 tons crushed, yielding \$7300. Mine improving."

COLORADO UNITED.—The manager's accounts for the month of March, received May 10, show a net profit of \$854.83.

RICHMOND CONSOLIDATED.—Telegram from the mine at Eureka, Nevada, Week's run, \$65,000, from 990 tons of ore. Refinery, \$50,000. Furnaces irregular.

SIERRA BUTTES (Gold).—Results of the working at the Sierra Buttes and Plumas Eureka Mines for April:—Sierra Buttes: Total receipts, \$27,072; total working expenses, \$20,831.—Plumas Eureka: Total receipts, \$43,325; total working expenses, \$21,703. No sulphurets were worked during the month.

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drive south of cross-cut, north of shaft, to six men, at 75 marks per metre; the lode here is yielding good saving work for copper ore, and it is opening up a steep ground. The end is becoming harder for driving, and it is letting out a quantity of water; hence our progress is not so good as we could desire; looking, however, at the character of the lode generally we think a change for the better will shortly take place. To rise in the back of the 120 metre level on the hanging-wall of the lode, to two men, at 14 marks per metre; here we have a fine, promising looking lode, which is yielding some good stones of copper ore. We have put the men hitherto employed in No. 1 stoppe south to cut through the footwall of the lode in the winze sunk below the 120 metre level, so as not only to prove this part of the lode, but also to communicate and lengthen the stoppe in the back of the 140, north of rise; we have a very good lode in the north end of the stoppe, and, therefore, we are led to believe that the ore-bearing part is still standing in the footwall of the lode; having had a rich course of copper ore in the level above (120) we may expect equal results in cutting through the lode at this point. No. 2 stoppe, in back of the 120 metre level, south of shaft, to six men, at 15 marks per metre; the lode is worth 17½ per fathom. No. 3 stoppe, in back of ditto, to six men, at 18 marks per metre; lode worth 10½ per fathom. To stoppe the back of this level, on footwall of the lode, to six men, at 20 marks per metre; lode worth 15½ per fathom. The 100 cross-cut, to drive east of level, north of shaft, to six men, at 35 marks per metre; the ground has a favourable appearance, and water is issuing freely, which is a good indication; this end is being pushed on, so as to reach the Alexander shaft, and also to come under the course of copper ore driven through in the deepadi level north of this shaft. To stoppe the back of the 100, north of shaft, to six men, at 35 marks per metre; lode large, and worth 10½ per fathom. We are pushing on the dressing of copper ore, and all our surface work is going on satisfactorily.

[For remainder of Foreign Mines see this day's Supplement.]

THE KURILLA MINE.—This mine, to the full extent that its restricted amount of funds at command will allow, is making its way at a more rapid rate, and not the actual richness of the lodes, or an improvement in the policy of the superintendent, is what is required for the purpose of rendering it highly remunerative; the want of available capital will account for the comparatively limited area to which operations have been confined for so long. Had the requisite funds been available even the unprecedentedly low price of copper, since the mine has yielded regular returns, could not have hindered its progress, for it is anticipated that the produce of last year (the worst in the annals of copper mining) will more than meet all expenses when the ore, a large portion of which is still on the water, is sold in England. During the last half of the year 1879, 1500 tons of 16 per cent. ore were shipped from Wallaroo, nearly the whole of which was produced from the lode, as the want of capital led to delay in carrying on work in the other. At present deepening and other means of draining the lodes are being vigorously carried out, and large quantities of ore are being uncovered for future sales. Much has been done, but a great deal more might have been effected had it not been for the absence of dressing machinery, which has not only made dressing more expensive and less efficiently performed, but hundreds of tons of ore that could have been turned to profitable account still lie on the mine unsold. In a short time, however, an engine with crusher, stonebreaker, and jiggers will arrive from England, and be put to work as speedily as possible, when, doubtless, there will be a much larger output of ore, and of a much higher percentage than hitherto. During the past year a new lode has been met with to the north of the one previously discovered, and known as Morphet's lode, and large quantities of ore are already laid open, and it is likely to prove an important auxiliary to the older lodes. The principal engine-shaft is now being sunk below the 55 fm. level on the old lode. From this level a tunnel is extended northwards towards Morphet's lode, with the object of bringing the water from thence to Hall's engine, and it is intended to continue the tunnel to the new lode still further north, so as to drain the whole mine by the same engine. The adjoining Devon Consols Mine, or a considerable part of it, containing the continuation of the Kurilla lode, is not under offer to the proprietors of this mine.—*The South Australian Advertiser*, April 3.

GOLD MINING IN MYSORE.—From a notice issued by Messrs. Arbuthnot and Co., it will be seen that a company is being formed to work a portion of the land in the gold yielding region of Ooregaum in the Kolar district. The Ooregaum Company is now hard at work, and the analyses of quartz from its mines by Mr. Brough Smith show conclusively that the auriferous yield is exceedingly good, and that the results to be obtained are all that can be desired. The gold fields are not far from the Kolar-road Station—six miles—and have everything in their favour—climate as good as Bangalore, food and labour cheap and plentiful, and there is every reason to believe that the gold mining industry will be a great success in the Mysore country. Those who wish to invest in a good speculation have now such an opportunity placed within their reach, while the well-known name of Messrs. Arbuthnot and Co. is a sufficient guarantee that the Madras Gold Mining Company will be carried on properly. Judging by our English contemporaries, it would appear that there will be no difficulty in allotting the whole of the shares in the London market, where gold mining companies are highly thought of as safe investments.—*Bangalore Spectator*.

THE LANRWST AND D'ERESBY DISTRICT.—A few years ago lead-mining in the hills around Lanrwst and Bettws-y-Coed commanded but a local interest. The industry was in the hands of private and generally resident capitalists, or it was pursued by tributaries who were permitted to roam at will over the moors shod on the backs of lodes. Since then, however, many of the best known and most experienced mining capitalists have considered the district worthy their attention, and now several mines belong to companies (formed by them) whose shareholders are scattered all over the country. Hitherto the results, on the whole, have been sufficient to induce those qualified to judge on the subject to persevere in the belief that ere long large and valuable deposits of ore must be discovered; but mining development in a comparatively new district is necessarily a business requiring labour and patience, and the discovery just made at South D'eresby Mine is, therefore, regarded with unalloyed pleasure. Such discoveries encourage legitimate enterprise, and are an incentive to the employment of capital in new mining industries. Captain Abalom Francis, who has just inspected South D'eresby, considers the lode worth 2 tons to the fathom, extending some 200 fms. through South D'eresby, and thence without interruption for some hundreds of fathoms through a property at present lying idle, immediately to the north. This discovery is regarded as strong evidence that this district will shortly become one of the chief lead producing districts in the Principality; its importance cannot be over-rated, and it should stimulate lead mining enterprise throughout the country, as well as the development of the immediate district. Probably the sets mentioned as now lying idle will not long remain unexplored, and doubtless the companies which possess the surrounding mines will exert all their powers to attain success equal to that which has attended the development of the South D'eresby Mine. To all who know the geological formation of the district, and the mastery character of the lodes by which it is traversed, it will be a surprise if their efforts are not equally and adequately rewarded.

NEW AND ECONOMIC LUBRICANT.—A new lubricant, which can be manufactured at a comparatively small cost, and which in practice is found to be very efficient, has been invented by Capt. F. P. Warren, of Southsea, who proposes to mix ozokerite or ozokerite pitch with grease or oil (animal, vegetable, or mineral) according to the fluidity he wishes to obtain. For ordinary purposes one-third of ozokerite or ozokerite pitch, with two-thirds of mineral oil, is found to be a good lubricant.

COLLIERY ENTERPRISE.—The Cardiff and Swansea Coal Company have succeeded in winning a vein of steam coal at their Resolven Colliery. The coal is a solid seam 3 ft. 9 in. thick, with a rock top, and of excellent quality. Owing to the rock top the coal will be worked at a comparatively small cost, and as the seam extends under 3000 acres of the company's property the quantity is not likely to be exhausted for many generations.

HEATING REVOLVING FURNACES.—An economic method of heating the revolving furnaces used by alkali manufacturers has been invented by Dr. PAULI, of Mannheim. These furnaces are horizontal cylinders of iron lined with fire-brick, and open at each end. They are heated by the

SPECIAL NOTICE. WEST DEVON CONSOLS.

PRICE LAST SATURDAY WAS

£2½ to £3;

THE PRICE TO DAY IS £3½ to £4, AND
WILL GO HIGHER.

These Shares, as predicted, have further advanced. Only a few weeks ago we recommended their purchase at £2, and we are glad that many took our advice. We then stated they would advance and they are now £3½.

The Copper Lode recently cut is said by practical men to be the best seen in this district for very many years, and as it is proved beyond question to be one of the famous Lodes of Devon Great Consols (which is only separated by the Tamar) it may turn out a similarly great prize.

Some think the Shares will now go to £50, but we are not urging a purchase of Shares on that account (although the £1 Share in Devon Great Consols went to £800 and obtained over £1200 in dividends, and therefore it is impossible to say what may happen). We say simply that the Shares are cheap; will assuredly rise; and large profits are certain to be made by those who now purchase them.

Devon Consols commenced making her wealth only 30 fathoms from surface. West Devon can soon cut four Lodes at this depth; and can, besides, resume operations 80 fathoms deep when these Lodes will shortly fall in and form a junction.

With the same confidence in which we publicly recommended these Shares at £2, we now advise their purchase at £3½. The fact that a large number of Shares have again changed hands this week in the Stock Exchange at the latest prices speaks for itself.

J. SCOTT & CO.,
5, Copthall Buildings,
Throgmorton Street,
E.C.

Business transacted in all descriptions of
Stocks and Shares at current market prices.

Mining Correspondence.

BRITISH MINES.

ABERLYN.—John Roberts, May 12: The Valley cross-cut seems to be getting near to the lode. There is a flat joint in the forebrest, which appears to be connected with the lode. There are some good stones of lead in the joints, and branches of spar in the end; let to six men, at 9½. 10s. for 3 fms. The cross-cut at No. 3 is now from 6 to 7 fms. from the soft lode, and I expect that we have about 4 fms. more to drive to cut the hard lode. This cross-cut is directly under the great blende lode at the No. 2 adit, and will prove the lode 16 fms. deeper than that point; let to two men for the month at 8½. per fathom. The large stope at No. 2 are very much of the same value as they have been; these are being worked by eight men, at 4½. per fathom. The stope on the soft lode is rather poor, the lode being pinched small. I have removed two of these men to the Valley cross-cut, and kept the other two to follow the leader of blende, as there can be but little doubt that it will soon open again. At the No. 1 we have met with to-day a nice branch of lead, of which I shall be able to say more about in a day or two.

ASSHEVEN.—Joseph Garland, May 12: The 30, east of boundary shaft, was driven last month, 1 ft. 1 in. wide, carrying a good deal of rich blende intermixed with good saving work for lead ore. In the last few feet driving old workings were met with, in which the lode had been taken away; driving has consequently been discontinued. The driving has opened up a short length of tribute ground. We have at present two tribute pitches working, one in back of 20, south of Mawr shaft, by two men, at 7½. 10s. per ton for lead ore, and one in the back of the 50, east of boundary cross-cut, by two men, at 6½. per ton for lead ore. On Wednesday last we sampled for sale to-morrow 5 tons of lead ore.

BEDFORD UNITED.—R. Goldsworthy, May 12: There is no change to notice in any part of the mine since my last report. Saturday next being pay and setting day, a full report shall be forwarded next week.

BELL YEAN.—James Bray, May 8: During the past week we have passed through a branch 1 ft. wide, composed of capel and spar, spotted with ore. It underlays 3 ft. in a fathom towards the Gobbins lode. I consider it a very kindly branch.

BELWDA.—Thomas Parkyn, May 13: We are making good progress in driving the adit on Webb's lode, also in sinking the new shaft. The lode continues throughout of the same rich character as last reported on, and is proving to be a large and productive lode. Some good stones are being sent up to-day. Everything is proceeding satisfactorily.

BLAEN CAELN UNITED.—J. Pell, May 13: The new launder has this week been fixed, and by Saturday the cut through the embankment will be closed up. We have had to run off all the water, and our progress since last week has been interfered with both underground and in dressing. The stope in the 30 is improving. The cross-cut is in very hard ground.

BLUE HILLS.—S. Bennetts, R. Harris, May 8: The lode in both the 42 east and west ends is about 2 ft. wide, worth 5½. to 6½. per fathom. In the 30 east end the lode seems to be again improving, is about 1½ ft. wide, and worth 8½. per fathom. The rise over this level is worth 8½. per fathom, and the winze below 25½. per fathom. The lode in the 20 east end is at present small and unproductive.

BODDIDRIS.—H. Hotchkiss, May 13: Maes-y-Pwll Lode: The ore course in the 17 east has improved this week. Meadow shaft is going down in a beautiful bearing limestone, in which I expect to find the lode rich in mineral. Dressing and other work progressing steadily.

BWLCH UNITED.—N. Bray, May 8: I have nothing particular new to communicate except that the winze has been holed from the 60 to the 70, and which will enable us to commence stoping as soon as the stuff is cleared. The 100 east is improving, and producing some beautiful branches of solid lead ore, with congenial stratum. Other points without alteration. I have a strong force of carriers and others bringing the materials recently purchased on to the mine, and going on with their preparations for erecting.

CAMBRIAN.—Thomas Glanville, May 8: Esgrair Fraith, Eastern Shaft: We have not yet completed cutting plat, but the part of the lode taking out will yield 3 tons of copper ore per yard. The stope in the back of the 70 and 86 yard levels will produce 2 tons each of copper ore per yard. In the 46 yard level east the part of the lode driving on is composed of lime intermixed with copper ore. In the 20 yard level east the lode is composed of gossan throughout. There is no change to notice in the 86 yard level east. We are getting on with the sampling, and shall commence carting it to the railway station in a few days. In consequence the carting has been delayed, we have been obliged to draw and pump with the Robey engine. The little water we have is reserved for dressing purposes.

CARNARVON (Copper).—J. Roberts, May 12: There is nothing new to report here since I wrote on Monday. The pumping is going on constantly, and the water forking just at the same rate as last week.

CLEMENTINA.—J. Roberts, W. Sandoe, May 12: The lode in the sump at the 15 continues to look very well, worth 15 cwt. of lead to the fathom. The rise at the 34 in both ends looks much the same, as for some time past; the lode is worth from 10 to 15 cwt. of lead to the fathom.

COMBARTIN.—T. Comer, May 13: The various points of operation in the mine have without any change to notice since the date of our report for your general meeting held last week. The works are being pushed on with all possible despatch. Saturday next being our monthly setting-day we will send you a full report of the mine for next week.

CORNWALL GREAT CONSOLS.—Henry Miners, May 11: I am again pleased to inform you that the prospects of the mine are still of a very promising character. The lode in the west, and in the winze sinking from the deep adit to communicate with this level, is looking well, and producing good work for the stamps. As soon as those two points are laid open for stoping, which will take about six weeks or two months more, we shall not doubt greatly increase our returns. The lode in the bottom level, east of shaft, is equally promising, and producing saving work for tin. The different stopes are still producing their usual quantity of tinstone, and are also looking promising. The work in the engine-shaft is progressing favourably, and the bearings and cistern are fixed. Part of the life was delivered on the mine last week, and as soon as all is delivered we shall at once fix it and commence sinking. We have another parcel of tin in preparation for the market, which will be ready shortly. The machinery is working well.

DENBIGHSHIRE CONSOLIDATED.—R. Prince, A. Francis, May 13: Stopes in the 66 remain without any change. We are likely, judging from the character of the ground, to see an increased yield before many days. I am also glad to say that a great improvement has taken place in the 12 east of main lode, and we are now getting some very good stuff for the washing floors. The tributors in the back of the above level are doing very well, some splendid lead having been obtained from their workings this week. Progress is fair in the north cross-cut, and we are busy at the dressing floors.

DERESBY CONSOLS.—John Roberts, W. Sandoe, May 12: The Cobblers lode is getting more open and rugly, and letting out more water, which we consider a good indication; set to two men, at 10½. per fathom. The Red lode is still small, and being under the impression that this cannot be the main part of the lode we have put them to open on a higher part, which seems to be a large and more like the lode at surface. The Gorse heading, after having closed up a little for a few days, seems now to be opening wider again; set to four men, at 7½. per fathom.

DERESBY MOUNTAIN.—J. Roberts, W. Sandoe, May 12: The No. 2 stope is much the same as they have been for some time past. The Gorse shaft we expect will be down to the 15 next week. The part of the lode that is in the shaft is producing good stones of lead. As soon as this shaft is down we shall immediately set to and fix the new engine, which will take us nearly a fortnight, including the fixing of a new bob on the shaft, which is almost ready. The lode in the sump and stope continues much of the same value, but we cannot break so much stuff as we have been able to do on account of its getting more out of hand for working; this will be overcome when we get a communication with the 15. The dry weather affects the dressing rather materially.

DURBY SYKE.—William Vipond, May 8: I have not much to report from here this week. The mason has begun with building the wheel-pit; I have set him a bargain at this at 2s. per cubic yard. The men are cutting the water-race, and getting close to the pit.

EAST CARADON.—James Kellow, May 12: During the past month the winze has been sunk below the 150 on counter lode 1 fm. 0 ft. 6 in.; the lode is 2 ft. wide, chiefly peach and quartz intermixed with mundic and occasional stones of copper ore; set 2 fms. stent by 12 men, at 35½. per fathom. To sink the winze below the 130 east on this lode, 1 fm. stent, by four men, at 9½. it measured 1 fm. 3 ft. 9 in. the lode in which is 3 ft. wide, chiefly mundic, and producing a little copper ore. To drive the main cross-cut south at this level, 1 fm. stent, by four men, at 23½. it was driven 5 ft. 6 in. A tribute pitch by two men, set at 15s. in 1½.

EAST LONGSTONE.—Thomas Phillips, May 12: The men at the south adit level are still driving south, and although they have driven about 7 ft. through the hard ground which they had just discovered when you were here last, they have not yet got through it, and I am now strongly impressed with the belief that it is a great "cab" lying under the lode. How much further they may have to drive to get through it it is impossible at present to ascertain. I am pushing them on with the driving of the end as fast as I possibly can, but the ground is hard, and consequently their progress is rather slow.

EAST ROMAN GRAVELS.—Arthur Waters, May 12: Setting Report: The south engine-shaft to sink below the 97; set to nine men on contract—12 fms. for 140l. The 97 to drive south of shaft, by four men, at 13½. per fathom; a good sparry, ore lode, but not to value at present. The 89 to drive south, by six men, at 8½. per fathom and 10s. per ton; lode very wet, and worth 2 tons of lead ore per fathom. Winze sinking below the 75 south, by nine men, at 10½. per fathom and 10s. per ton; lode worth 3 tons per fathom.—Tribute Department: Four pitches in back of the 75 south, by ten men, at an average of 4½. 5s. per ton; worth together 5½. tons per fathom. Pitch in bottom of the 50 south, by two men, at 5½. 10s. per ton; worth ½. ton per fathom. Pitch in bottom of the 46 north, by two men, at 6½. per ton; worth 12 cwt. per fathom. Pitch in bottom of the 20 south, by two men, at 5½. 10s. per ton; worth ½. ton per fathom. Pitch in the 6 fm. level south, by two men, at 6½. per ton; worth ½. ton per fathom. Tributors pay all costs, including 20s. per ton for dressing. Our next sampling will take place next week.

EAST VAN.—W. H. Williams, May 13: In the eastern pit No. 2 we have not yet seen the lode, owing to the thickness of the cap or cover overlying it. I yesterday put the men to drive a short cross-cut a few yards below, which I believe will take us into it. At present there are only four men there, but I shall add two more on Monday.

EAST WHEEL BULLER.—W. Tregay, May 13: The lode in the 40 is quite 12 ft. wide, of the most beautiful gossan, and we fully calculate on meeting with a good course of copper ore at this depth.

EAST WHEEL CREBOR.—George Rowe, May 12: Our shaftmen are busily engaged in cutting ground around the engine and whim-shafts, taking up a considerable influx of water to make the shaft sufficiently dry to perform their work with speed, &c. Also putting in dividing and casing timbers to bring down the whim-shafts, fixing footways, and other necessary work to suspend the pitwork in dropping the lifts down through the water. We are now pretty near the 20 fm. level plat, where the shaft is exceedingly wet, and will require some additional labour to make the shaft dry to do the work we are now doing with economy and speed. The engineers have pretty nearly completed the fixing of our new Robey engine, which is working well and very satisfactorily.

EAST WHEEL LOVELL.—Richard Quantrell, May 22: In Severgan shaft, sinking below the 15, we are carrying 5½. in width of the south part of the lode,

and there is more lode standing to the north. The lode produces stamping work, with good stones of tin. At Tregonebris we hope to be in for next week. **FLINTSHIRE GREAT CONSOLS.**—J. Woolcock, M.E., May 11: Good progress is being made in the sinking of the new shaft. The lode I mentioned that was discovered in the work is becoming more defined, with a matrix composed chiefly of limestone, gossan, and clay, with good rich lead ore, although at present I cannot value it. It has a most promising appearance, and in my opinion cannot fail to produce profitable quantities as depth is attained.—Quarry Level: No noteworthy change to report since my last—still doing steady work.—Engine-house Level: Tributors are breaking good ore of a rich quality, from a strong, masterly, well defined lode, composed of bands of chert and gossan, worth at present 10 cwt. of ore per fathom. A difficulty exists in getting the ore and debris away from this part of the mine, consequently I would now recommend you to have the water forking from the engine-shaft, so that the ore can be beaten away from the back of a lower level, and also commence a new level west from the bottom of engine-shaft; thus we shall be developing this part of the set in an efficient and economical manner. By working systematically in this way large courses of ore would be laid open. I must still repeat my opinion that we have one of the finest properties in the Principality, and one which can be worked with a very small amount of expense.

GAWTON COPPER.—G. Rowe, G. Rowe, jun., May 8: The lode in the 117 is improving in character, with fine stones of ore and arsenical mundic, yielding 5 tons per fathom. The lode in the 105 east is also improving, yielding 6 tons of arsenical mundic and ore per fathom. The stope in bottom of the 125 is worth 14½. per fathom. No. 2 stope, in bottom of the same level, is worth 12½. per fathom. The lode in the 95, west of cross-cut, is producing 6 tons of arsenical mundic mixed with ore per fathom. The lode in the stope in back of the 95 is worth 15½. per fathom. All other points are without change.

GLASGOW CARADON CONSOLS.—Wm. Taylor, Wm. J. Taylor, May 11: There is nothing new to report in the engine-shaft sinking below the 102; the ground is favourable granite. The new lode in the 102 east is still split and somewhat disordered, producing some good ore, but not of very much value; the ground, however, is favourable, and we hope it will soon improve. The 90 west, on north lode, is worth about 6½. per fathom; there is another branch coming out from the 80 here, which will soon fall into the lode, and we hope make it more productive. The 90 east on this lode is looking better, producing some good ore; altogether of a more kindly appearance. This is an important point. No change in the winze sinking below the 90, on south lode. A rise on this lode nearly up to the 73 is worth 10½. per fathom; we intend to put out a short cross-cut from the 73 to prove it further. The stopes and pitches throughout the mine are about the same value as last reported. We sampled yesterday (computed) 150 tons of copper ore, which will be sold on the 19th inst.

GLENROY.—R. Rowe, May 12: We have resumed sinking the shaft below the 108. In the 108 north the lode is still large, and during the week has shown a little lead besides blende. The south end is still going through a wide lode without any particular change. The water is now so low that we are obliged to work the engine night and day.

GREAT HOLWAY.—W. T. Harris, May 13: I am glad to say we have fixed the bearings and cistern in Roskell's shaft, and are making very good progress in connection with the pitwork. The various stopes and pitches at Garden and Level engine-shafts are quite equal to my last valuations. We have sent off 30 tons of blende to Messrs. Dillwyn and Co., realising 4½. 14s. per ton.

GREAT LAXEY.—F. Reddick, May 12: Having driven the level at the 259, bottom of Welsh shaft, far enough in the rock for the purpose of facilitating the cutting of the lode afterwards, we have turned into the lode, which is chiefly spar of a promising description, and is worth 2 tons of ore to value; only about 2 ft. of the width of the lode is yet cut out. The winze in the 247 next continues to be worth about 12½. per fathom, and in the end there is no change. The lode in the 235 end has improved, being worth about 12½. per fathom, and also more promising. On nearing the slide the lode in the 220 end has again become productive; present value 20½. per fathom. It has also tapped the water in the north ground and drained the bottom of Dumbell's shaft. The three stopes in the roof of this level are worth 40½. 40½. and 15½. per fathom. One in the east of the 210 is worth 12½. per fathom. The winze in the 210, which is the sole of the 200 is holed to the stope in the roof of the 210; they will now commence to stope from the bottom of it, where the ground is worth 25½. per fathom. There are other two stopes working in the sole of this level—one worth 18½. and the other worth 30½. per fathom. The stope in the sole of the 190 is still worth 40½. per fathom, but the stope in the sole of the 145 south about 15½. per fathom. The stope over the 90 south is worth 25½. per fathom.

Dumbell's: This shaft is, as above stated, now drained of water, so that we can at once resume the cross-cutting of the lode at the bottom, and that due to the driving of the level north and afterwards south also. The sink in the sole of the 215 south is worth 15½. per fathom, and stope in roof of same level north 30½. per fathom. Since passing through the rich ore in the 200 end north there has been about 9 ft. of comparatively poor ground, but the end is again improving, and now worth 15½. per fathom. The stope in this level are without change. There is a new joint sink and stope in the sole of the 185 north worth 30½. per fathom, and the one in the roof has improved to 40½. per fathom. I regret to say that the recent more hopeful appearance in the 140 end north has again dwindled, and the lode is now both small and poor. It is more pleasing to say that the lode in the winze in the 85 north is worth 100½. per fathom. There is no other change.

GREAT RETALLACK.—J. Harris, May 8: The stopes are looking rather better for blende than when I last wrote you, the stope at the 57 being worth from 1½ to 2 tons of blende per fathom, and the stope at the 53 worth fully 3 tons per fathom. We are pushing on our dressing as fast as possible for our sampling next week.

GREAT RETALLACK.—J. Harris, May 12: The lode in the stope above the 57 fm. level is looking better for blende, worth fully 2 tons per fathom, and the stope above the 53 is without change since last reported, worth 3 tons of blende ore per fathom.

GREEN HURTH.—W. Vipond, May 7: The Swan shaft is again in a haze, but not hard; it is making good progress. I shall let you know to-morrow the depth sunk during the week. The stope south over the 30 is hardly so good as it has been, but not yielding much less than last reported—about 1 ton of ore per fm. Stope No. 2, north of Vipond's sump, is yielding 2 tons of ore per fathom. The stope near Robinson's sump is yielding 2 tons of ore per fathom. We finished the delivery of the seventh wagon of ore yesterday, and the eighth will leave here to-morrow.

GRIFFIN.—Chas. Kneebone, May 12: We have communicated the rise from the 15 to the 10, and commenced stoping. I have offered the ground to stope north and south from the rise to eight men, at 50s. per fathom; not yet taken, but I expect to let it to-morrow, and the lode is worth 1 ton of lead ore per fm. in each end of the rise. In the No. 1 stope, north of shaft, the main lode is worth 1 ton of lead ore per fathom. I have put those men to strip down a piece of ground on the east side on a branch lode which goes off to the south-east, and worth 10 cwt. of lead ore per fathom; let at 35s. per fathom. The No. 2 stope, north of the No. 2 shaft, is let to four men, at 45s. per fathom; worth 12 cwt. of lead ore per fathom. I have offered two stopes in the adit; not yet taken. The tribute pitch on the Pen-yr-Alth lode yields very regularly about the same quality ores, and there is now a good quantity of ores at the surface ready for dressing. We have made considerable additions to our slime-setting tanks, and we are dressing more for the next sampling as fast as circumstances will allow. There is no surface water anywhere just now, and our pumps will only supply six or seven hours' water for the jiggers, &c., in the 24 hours; the lead stuff is consequently still accumulating, but we hope to have our next sampling ready at the time appointed.

GUNNISLAKE (Clitters).—W. Skewels, J. C. Seecombe, May 12: The lode in the engine-shaft, sinking below the 224, is worth 12½. per fathom. The lode in the 224 east is 2½ ft. wide, producing saving work for copper ore—looking more promising. The lode in this level west has improved, and is worth 10½. per fm. The lode in the 212 east is making a larger and looking more promising for improvement. The lode in the 212 west is poor for the time. The lode in the rise in back of the 212 east is worth 8½. per fathom. The lode in the 200 east is worth 8½. per fathom. The lode in the rise in back of this level is worth 10½. per fm. In this level west the lode is poor. The lode in the 188 east is worth 7½. per fm., and shows strong indications of still greater improvement. In driving the 188 cross-cut south for Crease's south lode we have cut more water, which is a strong indication that we are nearing the main part of the lode. The lode in the 178 east is worth 7½. per fathom. The stopes and pitches are producing their usual quantities of copper ore.

GWERNY-MYNYDD.—A. Francis, May 13: Fawnog: The Brammock sump is now down nearly 12 yards, and the drift thorough towards the flat has so relieved the water pressure as to enable us to resume the sinking of the eastern sump and western downhill to the ore ground, which is now within a few days of being accomplished, and judging by appearances we are bound to have a success in both places. I have nothing particular to report in the various points except that the progress is satisfactory. The lode in the 100 east, from this shaft west will, we expect, be communicated with the shaft still further west early next week, when trials will proceed in the upper flat here without interruption, where appearances warrant the highest expectations.—Deborah: The new arrangement for sinking into the upper and lower flats by means of a horse whimsey is now completed, and the sinking is proceeding satisfactorily. I cannot exactly say what distance we have yet to sink to the upper one, but indications denote our close proximity to the same.—Gwynedd: The Treasure shaft is now secured to the bottom of the old adit level, which point it is completed for our engine-shaft. The old adit in question is that connecting the old Gwynedd Mine with the Treasure shaft, which we are opening for a short distance with a view of damming back the water, and thereby enable us to sink the Treasure shaft with greater speed. The deep adit is being driven towards the above shaft with all speed. The first boiler purchased has been brought to the mine. It is in first-class condition. The second we hope will be here on Saturday, which is equally good. The engine lately purchased is being taken down, and all the lighter portion brought to the mine in excellent condition.

HERDSFOOT.—P. Tenby, May 12: The lode in the 160 north is worth 15 cwt. of ore per fathom. I am agreeably surprised to find such a strong well-defined lode standing in this level; it is fully 3½ ft. wide, and as fine a looking lode as can be seen, and letting out a lot of water. The 205 north is still worth 20 cwt. of ore per fathom; I am putting in a new air machine to improve the air in this level. We have commenced to clear the stuff from the new shaft, and shall continue to do so until we communicate with the 106 plat, when we shall at once lay down the new footway for which ladders, &c., have been prepared. The casings and dividends are all in readiness for the new shaft. Level east of the 112:—STON DOYX.—T. Richards, May 12: In the deep shaft: Level east of the south cross-cut the lode has the same promising appearance, containing quartz, peach, pryan, capel, and copper ore, and will produce of the latter about ½ ton of good quality ore per fathom, and from general appearances there is very good indication of an early improvement. The ground in the rise against the shaft is without material change, being composed principally of granite with ribs of hard capel intermixed. The foundations for the engine-house and loadings for fly-wheel and whim cage are excavated. The foundation for the shaft-loch commenced and the magazine is nearly complete.

KILLFRET.—John Mitchell, May 12: The lode in the 90, driving east and west of the shaft, is very much improved in appearance; also getting wetter, from which I think we are very near through the elvan. We expect to hole the rise in the back of the 80 to the 70 this week, when the men will resume driving the 80, and shall set the ends of the rise on tribute. The lode in the east is 3 ft. wide, and wet; and producing occasional stones of tin. In the winze, sinking below the 60, the lode is producing saving work for tin. In the adit level, driving west of Black Dog shaft, the lode at present is mixed up with a slide, which has disordered it. The stope in the back of and about 10 fms.

behind this end are worth from 8s. to 10s. per fathom. We are pushing on the sinking of the new shaft as fast as we can; it is now 28 fms. from surface.

LADY ASHBOURNE.—W. H. Hosking, May 13: We are very actively engaged here at present; the builders have commenced building the engine and boiler house, and in a few days we shall have the boiler in its place. Meanwhile we are completing arrangements for the winding and pumping machinery, which we shall have put in place and connected simultaneously with the erection of the engine, so that the whole may be put in operation at the same time, and thus give us the fullest advantage of our steam-power. The shaftmen continue to make good progress in sinking the engine-shaft, which they have now down nearly 8½ fms. from surface, and I am glad to inform you that the lode is improving with increasing depth; it is now 2½ fms. wide, composed of beautiful gossan, quartz, muddle, and copper, with silver finely interspersed—a most healthy-looking lode, while the containing rock on either side is a congenial light-blue clay-slate of a decidedly argilliferous character, and thickly traversed by small veins terminating in the lode. Altogether the lode and its containing rock supply the strongest evidence to the practical mind in favour of our laying open a remunerative course of mineral when a reasonable depth has been attained, and with this object in view we shall push forward our operations as rapidly as possible.

LADY BERTHA UNITED.—Thomas Neill, May 12: We are driving the cross-cut adit south by four men; the ground as we near the lode appears to be more mineralised, producing muddle and spots of copper ore. The engineers will be here to-morrow, when no time will be lost in getting on with the machinery.

LADYWELL.—A. Waters, May 13: There is a very promising lode in the adit going south of new shaft, composed of carbonate of lime, gossan, and clinkers of lead ore; some very rich lumps of ore have been broken in the end to-day.

LEAD ERA.—J. A. Ede, May 12: I have set for the month as follows:—The adit level to four men, at 40s. per yard. The western end in flat at 30s. per yard. The eastern end in flat at 22s. 6d. per yard. The improvement in the eastern level, noticed in my report of last week, remains unaltered; we have now proceeded 6 fms. across the furrow. The other ends are much the same.

LANDEGLA.—H. Hotchkiss, May 13: All points of development are progressing steadily, but I have no new feature to report this week.

LOMAX (Old Wheel Rise).—William Argall, May 12: During the past month we have driven 5 fms. on Thompson's lode in the adit level; the lode still continues to produce pyrites and carbonate of lead occasionally; it appears to be getting more hard and compact, and containing more silica.

MARKE VALLEY.—Wm. George, James Stenlake, May 13: The ground in Salisbury shaft is without change. The drive at the 148 east has been principally by the side of the lode, and more favourable than when last reported on. The progress in driving the 90 west continues very satisfactory, and we are pleased to say the character of the lode continues to improve; it is now 2½ feet wide, composed of peach, quartz, with fluor-spar, white prlan, and good leaders of high quality copper ore. In the end driving east from rise, in the back of the 40, the ground continues favourable, and the lode is yielding fully 2 tons of ore per fathom. In the 20 driving west, towards the end above referred to, the lode is improving, from which we yesterday broke some good stones of ore; this is very encouraging, and leads us to expect a good run of ore between the two points—now fully 40 fms. Our stoves are, on the whole, looking a little better, and with the tribute pitches are yielding quite equal to their usual quantity of ore.

BELLANEAR COPPER.—J. Gilbert, May 12: The lode in the 50, west of Gundry's shaft, driving east of cross-cut on the south-east part of lode, is 5 ft. wide, and yielding 4 tons of copper ore per fathom. The lode in the 60, west of shaft, driving east on the south-east part of lode, is 4 ft. wide, and yielding 3½ tons of ore per fathom; this lode is rather disordered by a cross-head, which has changed the bearing of it a little more to the north-east. The lode in the 60, west of shaft, on main part, is 2½ ft. wide, and yielding 3½ tons of ore per fathom. The lode in the 70, west of shaft, driving east on the south-east part of lode, is 5 ft. wide, and yielding 2½ tons of ore per fathom, and looking promising to improve. The lode in the 80, west of shaft, is 3 ft. wide, and yielding 1½ ton of ore per fathom. The lode in the 90, west of shaft, is 5 ft. wide, and yielding 1½ ton of ore per fathom, and the ground is easier for driving. The lode in the 110, west of shaft, is 4½ ft. wide, and still yielding 1½ ton of ore per fathom; the ground is still hard for driving, and up to this time we have not cut down much of the water from the lode. The lode in the old engine-shaft, driving east from the 100, is 2½ ft. wide, and yielding some stones of copper ore. There is nothing new in any of the cross-cuts, but we expect every day to cut the south-east part of the lode in the 40 cross-cut, west of shaft. All the stoves are looking just the same as for some time past. We shall sample on Tuesday next about 500 tons of copper ore.

MOBEA DU.—T. Mitchell, May 12: The bottom end here continues to look very well, and opening up good grey ground; the lode is worth about 6 tons of bluestone per fathom. We have no particular change to notice in the driving by the White Rock shaft, which is still running. The ground is still rather hard, but we are expecting a change here shortly.

MYNDYDD GORDDU.—J. G. Green, May 12: Our water supply from the Lerry has become insufficient for pumping, and we have in consequence been unable to proceed with any work in the 34 since yesterday afternoon. Up to that time very excellent progress had been made in the drive west since writing you last. The lode is of the same promising appearance, rather harder, and more wet; and I am disappointed at not being able to proceed, as there is very little doubt of our just entering the same productive run of ore ground gone down in the shaft. The men have been removed to drive the 12 west, until we can get the mine in fork again. There is no alteration to notice in any of the stoves. We are taking advantage of the wheel being idle to do some necessary repairs, empty slime pits, &c. I have arranged with a carrier to bring the 11-inch pumps (purchased at the Eagle Brook Mine sale) down at a cheap rate, and have agreed with Capt. Bray for 8s. extra to have an additional working barrel, windrose, and doorpiece, which will make 20 12-in. lifts complete. One lift will require instead of our present bottom lift, and the other for sinking, which I hope to proceed with when we have another supply of water. We shall then have a 9-inch lift of pumps for sale, or it may come in for a deeper section of the mine should the lode become of a closer and more solid nature.

NAST RHYS.—W. Mitchell, April 23: The level on the south lode has been driven 4 fms.; the ground is still rather troublesome for driving, being small and jointy with a strong feed of water coming from the roof. It will take 4 or 5 fms. more driving before we strike the lode.—Copper Lode: At every point where the lode has been opened on it looks very promising, although we have not broken much of it, we wish to trace it to be able to get the regular lode. Our present trench is 12 ft. deep and not any sign of the rock. The weather is now favourable, and we have all hands engaged at it in the hope of finding something valuable. I send a small box of ore stuff (broken from the copper lode) for your inspection.

NEW WHEEL PEEVOR.—W. T. White, May 8: We have not yet discovered anything particularly worthy of remark in the cross-cut at the 25, any more than occasionally small branches or feeders across the end, which indicates we are nearing the lode. The matrix is very good, and, what we have taken in the lode here it will be found to be the same. The price for the cross-cut is 5s. per fathom.

NORTH DRESBY MOUNTAIN.—R. H. Vivian, May 13: No. 1 Adit: We are now driving a cross-cut into the eastern side, where I expect to find a greater portion of the lode gone off, and the most productive part for lead ore. About 2 ft. has been driven since our setting on Saturday. We have already a good mixture of lead and vein stuff, proving that the lead bearing part is on the eastern side. I shall continue this cross-cut until I find the hanging-wall of the lode, where I expect we shall find more lead yet. Two of the men from this end are working in the cross-cut, and the level we have driven through, which is soft, the rise east of adit is going on with two men, at 8s. per fathom; lode still large, but we are not carrying the whole width, the productive part only. Here the lode is not looking quite so well as it has done, but I do not look on this as a bad feature as we are getting near to the surface. The best part of the lode for lead has been down in the level and is now to be seen under this level, but for want of air little can be done in opening up the mine in this direction. The putting this rise through to surface will enable us to work effectively here.—No. 2 Adit: This end has been again let for 90s. per fathom. We have now in the end a cross-cut of the shaft. The lode is still large, but it does not seem to affect the course of the lode, it keeps its course regular. What this change will do will be seen in a few days' driving; I am daily expecting a change for the better in this end. The new winze, started under this level, 10 to 15 fms. behind the forebreast, is the most encouraging feature seen in the mine. The men are breaking some fine lumps of lead ore; the part now sinking is worth full 1½ ton per fathom. As I said in a previous report it was difficult to get masons. I have managed to get them to put the roof all on the smith's shop and office. All being well I am proceeding to have the cross-cut finished by this day week.

NORTH HERODSFOT.—T. Trelease, May 13: The shaftmen are still engaged securing the ground at the shaft; we find the ground has given away between the end of the shaft and some old workings. I think the engine-house will be up about the latter part of next week, and we hope to commence putting in the engine as soon as the house is ready.

OKEL TOR.—H. Bulford, J. Rodda, May 12: The stoves in the back of the 65 and in the bottom of the 50 have improved considerably for copper driving in the past week. There is no change worthy of remark with regard to the lode. The different points in the lode in the mine continue to turn out on the average 30 tons of arsenical ore to the fathom.

PANDORA.—W. Nottingham, May 12: Engine-shaft: Steady progress is being made in sinking below the 33, on new lode, at the rate of 4 ft. per week. The lode is strong, and contains a strong mixture of blende, with stones of lead and limespars. The 33 on new lode, going south, is passing through a strong lode, which is grey throughout, but not rich yet. No. 1 stope, in winze over this level, continues to yield well, quite equal to former valuations. No. 2 stope, over the 23, is producing 15 cwt. of lead ore, with 1 ton of blende, with good ground for stopping.—Goddard's Shaft: No further improvement to notice in the 33m. level south. The stope in No. 3 winze south looks better. The ore is still holding down deeper than the winze is sunk; worth fully 15 cwt. of lead and the same of blende per fathom.—Surface: Dressing and sundry work is making steady progress, but the continued dry weather is beginning to effect us, and unless we have some rainfall in a few days I intend connecting the engine for pumping, and reserve the water we have for winding and dressing purposes.

PANTY-MWYN.—E. Parry, May 13: The tackle is fixed at the 15, on Modlyn shaft, and 16 men are sinking this shaft at 12s. per fathom; the ground is favourable for progress, but the water is troublesome to keep by hand. We are getting pumps ready to fix a lift in it next week, to be worked by the engine. We have this day struck what appears to be the top of a good run of lead ore in the bottom, and just had some fine stones sent to surface. We shall see more of this in a day or two, and will report to you. The 15, driving east of Modlyn, is at present without lead ore to value. We must try the width and value of the lode here soon by driving across the lode, for we have not seen the hanging wall for several fathoms back from the end. We are cutting a little more room in the winding end of the shaft. Above the 15, where the lode passes through the shaft, we have a lode worth quite 1 ton per fathom, which we intend driving upon at this point.—Griffiths's Shaft: No. 1 stope, east of Griffiths's, below the 15, is worth 3 tons per fathom. No. 2 stope, east of Griffiths's, below the 15, is worth 1½ ton per fathom.—Adit Level: We have four men clearing and timbering west from Bellan shaft, and are daily expecting to reach Red's shaft. There is no change in the condition. We shall send out samples of 25 tons of lead ore on Monday next.

PARYS.—E. Mitchell, May 12: The ground in the 90 cross-cut south is at present favourable for cutting, and good progress is being made in the driving. We have passed through the vein of copper referred to in my last, which was about 13 in. wide, and as the ground is of a favourable character we expect soon to cut another of the open cast lodes. The adit driving east of cross-cut towards

Colonel's shaft is progressing favourably into kindly ground. At Colonel's shaft we have a large quantity of water and debris to contend with, but we hope to finish the clearing and start sinking the same in a few days. The tribute pitches continue to look much the same for some time past.

PATELEY BRIDGE.—D. Williams, May 13: The cross-cut east from the 30, west of shaft, is now within a few feet of intersecting Fielding's vein, which has proved rich in the upper levels for a considerable distance; the ground in the present end has become more congenial, and much easier to work, and I hope soon to lay open a good section of profitable ore ground here. In the cross-cut from the 20, west of shaft, to intersect Lord Howe and Cleaver veins, we have passed through the "nip" referred to in my last report, and much better progress is now being made. We are continually meeting with branches of spar, intermixed with spots of ore, which doubtless are fliers off the vein in advance. I have also commenced a third cross-cut at the 20, to intersect the north branch of Fielding's vein, which will get under and ventilate the workings east of Fielding's sump, where we have every confidence of discovering a good course of air. We have cleared the breakages in the joint level, and are laying a tramway to Cleaver vein. We have three metal pitches, wrought by 14 men, at 5s. and 5s. 12s. 6d. per ton of dressed ore. We have sold Messrs. Hutchinson and Son 55 tons 11 cwt. 3 qrs. 20 lbs. of pig-lead, free of duty.

PENHALLS.—S. Bennetts, R. Harris, May 8: The 80 west has just intersected the cross-course, and in the east end there is no change to notice. The 70 west end is looking more promising, the lode containing good pieces of copper ore, mixed with tin, which are generally found in this mine to be favourable indications. The 70 east is without much alteration. In the 60 east end the south part of the lode is not yet intersected. The 50 west end is worth 7s. to 8s. per fathom, and the 48 west 6s. per fathom.

PENNANT.—May 10: The 80 west is a fine-looking lode, and the rocks of leadstuff got therefrom are splendid, but I think a further improvement is ahead. All the stoves look very well.

PHENIX AND WEST PHENIX UNITED.—J. Truscott, May 13: The various points throughout these mines do not present any particular change demanding notice since they were last reported on.

PLYMPTON.—H. Miners, May 11: I am pleased to inform you we are making progress with the cross-cut north for the intersection of the main lode, and up to this time have met with several highly mineralised branches. We have the timber on the mine for the repairs of the pumping-wheel, and shall commence about it in a few days. All the other work is progressing favourably.

POLROSE.—W. Bennetts, C. Roach, May 12: The sinking of the engine-shaft below the 80 is being pushed on with all possible dispatch; the shaft is now 7 fms. 2 ft. below the 80, and with our present rate of progress we hope to reach the 90 in about four weeks from this time. We still like the appearance of the branch in the shaft, which maintains its strong character, giving us every reason to expect that when it drops into the lode it will lead to something good.

PORT NIGEL.—J. Manley, May 12: The lode in the 68 east is from 4 to 5 ft. wide, composed of quartz, gossan, blende, copper, and lead ore, saving work for the latter. Good speed is now being made in pushing on this end, and we are fast approaching the ore ground gone through in the 56; the lode is loose, and letting out large quantities of water. The water in this end has overpowered our bottom lift, and the shaftmen are now engaged in putting down the new 11-in. drawing-lift. The lode in the 56 is about 2 ft. wide, yielding about 5 cwt. of lead ore per fathom, and further improvement is daily expected. The stoves generally are producing rather more lead.

PRINCE OF WALES.—John Andrew, May 12: There is no change in the deep adit cross-cut since last reported on. The engineers are progressing favourably with the erection of the engine.

RHYDALUN.—George Francis, May 13: Rhydalun: The course of ore still continues in the south cross-cut, and the indications are daily becoming more marked of our proximity to the east and west lode. The ore is of a very massive character, and lumps frequently occur weighing 10 or 12 cwt. Four men have been working on the east lode, and the lode is now 4 ft. wide, and yielding 1½ ton of ore per fathom, but it maintains the same productive character.—Rhydyrnwyl: We are making good progress in clearing the adit, and expect to be in the lode before the end of the month. Our prospects here are of a very cheering character.—Llyn-Pandy: We have cleared to the eastern end above the water level, and find a branch of the Llyn-Pandy lode going eastward, bearing a little ore, although it has been tried hitherto in shale of uncongenial character. We purpose driving upon it into the ore-bearing grit ahead, and have every reason to believe that we shall find the lode, and it will eventually be the means of our discovering the renowned Llyn-Pandy lode eastward.—Eastern Adit: We are making good progress in the eastern adit, and in our preparations to utilise our water-power to develop the property by drills.

ROMAN GRAVELS.—Arthur Waters, May 13: The various points in the mine are without change to notice since my report to the meeting held in London last week. We have to-day sent out samples of 200 tons of lead ore for sale next week.

SOUTH CONDURROW.—Wm. Rich, Wm. Williams, H. Abraham, May 12: The lode in the 80 end is improving. The ground is easier for driving in 70 east, and the lode looking promising to improve. There is no new feature to notice in any other part of the mine. We are busily engaged putting in a new fly-wheel shaft, new crank, and doing other necessary repairs to the stamping engine. We are forcing on this work night and day, so as to set the stamps to work as quickly as possible.

SOUTH DAREEN.—Henry James, May 13: The skip-road is completed to the 100. The sinking of the shaft will be about 100 fms. from surface, and the lode is worth 10s. per fathom. In going through the bargains to-day I see no change of importance in any of the drivings or stoves since last week's report, they remain about the same in value. The weather is still dry and the supply of water very small.

SOUTH DEVON.—W. Hooper, May 8: I report the following:—The 110 is set to six men, at 11s. per fathom; lode 4½ to 5 ft. wide, with a value of 18s. per fathom; this ore has been discovered several fathoms nearer the engine-shaft than in the 100, clearly showing the lode to be lengthening in depth. The lode in the back of this level, to the west of the engine-shaft, is set to four men, at 3s. 15s. per fathom; lode 4 ft. wide, worth 8s. per fathom. The 100 east, to four men, at 3s. 15s. per fathom; the lode here is at present disordered by a cross-course, but when this end gets into settled ground we shall cross-cut north, when no doubt we shall find the lode again as we did in the 90. No. 1 stope, in the back of this level, is set to four men, at 4s. 10s. per fathom; lode 4 ft. wide, worth 14s. per fathom. No. 2 stope is set to four men, at 5s. per fathom; lode 5 ft. wide, worth 16s. per fathom. In the 90 east is set to four men, at 5s. per fathom; lode 5 ft. wide, worth 16s. per fathom. The trial rise in back of this level is set to four men, at 2s. 10s. per fathom; the lode is 3 ft. wide, and worth 14s. per fathom; the rise for the whole distance from the back of the level has laid open a good lode for stopping. No. 2, or big stope, in the back of this level, remains of the same size and value as it has been for some time past, and we will be found to be the same. We have taken in the work this stope to keep it well secured with timber. In progressing with our levels eastward we find a slight increase of water coming from the ends, a natural result to be expected, and it is a matter of congratulation that the increase has not been more, considering the size of the cross-course driven through in the 90.—Surface: With regard to the probable returns for the next three months the result will greatly depend upon the number of jiggling machines we can get into play to work off the stuff we are able to pass through the crusher. At present we have found a quantity of stuff, from 75 to 100 tons per month. Also this quantity we have the mill obtained from the picking table and short jiggers, and the accumulation of muddle-copper. Should we receive shortly additional jiggling power I calculate we shall not fall short of 600 tons, or it may amount to more, but the results must depend upon the required machinery to get through the work.

SOUTH WHEEL OREBOR.—J. Goldsworthy, May 13: The progress has been rather slow this week in sinking the engine-shaft below the 16, owing to the increase of water; it has hitherto been done by manual labour, but I have the necessary pitwork for men, and a sinking to be done in the shaft with as little delay as possible. In the 16, driving north-east, good progress is being made; there is an increase of water.

TAMAR.—R. Goldsworthy, May 13: The lode in the 37 south is 3 ft. wide, producing 4 cwt. of silver-lead and 2 tons of fluor-spar per fathom. We are driving by the side of the lode in the 27 south, consequently no lode has been taken down since last report. The stoves and tribute pitches are much the same as for some time past, producing their usual quantity of silver-lead and fluor-spar. The machinery is in good order, and working well.

TANKERVILLE.—A. Waters, May 13: Setting Report: The 220, to drive east of engine-shaft, by six men, at 13s. per fathom; lode 4 ft. wide, worth 1 ton of lead ore per fathom. The same level, to drive west of shaft, by four men, at 10s. 10s. per fathom; lode 3½ to 4 ft. wide, worth 1½ ton per fathom. Four stoves in back of the 220 east, by 16 men, at an average of 5s. 12s. 6d. per fathom; worth together 5½ tons per fathom. Stove in back of 220 west, by four men, at 5s. 10s. per fathom; worth 2 tons per fathom. The 206, to drive west of shaft, by four men, at 10s. per fathom; worth 1 ton per fathom. We are sinking below 100 fms. from surface, at 9s. per fathom; lode 1 ton per fathom. A cross-cut going north in this level, by two men, at 9s. 10s. per fathom. A winze sinking below the 206 east, by six men, at 8s. per fathom; lode worth 2 to 3 tons per fathom. A cross-cut going south, in the 182 east, by four men, at 7s. 10s. per fathom. Two stoves in bottom of the 142 east, by eight men, at 5s. 10s. per fathom; worth together 3 tons per fathom.—Pump Sump: New shaft sinking by six men, at 8s. 5s. per fathom. Adit level from Watson's shaft to said new shaft, set to six men, at 5s. 15s. per fathom.—Tribute Department: Pitch in back of the 206 west, by two men, at 5s. 10s. per fathom; lode worth 1 ton per fathom. Pitch in back of the 192 west, by two men, at 5s. 10s. per fathom; lode worth 1 ton per fathom. Pitch in back of the 130 west, by two men, at 5s. 10s. per fathom; lode worth 1 ton per fathom. Pitch in back of the 120 west, by two men, at 6s. per fathom; lode worth 1 ton per fathom. Pitch in back of the 100 west, by two men, at 5s. 10s. per fathom; lode worth 1 ton per fathom. Pitch in back of the 62 west, by two men, at 3s. per fathom; lode worth 1 ton per fathom. Pitch in back of the 62 east, by two men, at 6s. per fathom; lode worth 1 ton per fathom. Pitch in back of the 42 east, by two men, at 4s. 15s. per fathom; lode worth 1 ton per fathom. Pitch in back of the 74 east, on north lode, by two men, at 6s. per fathom.

TEESDALE.—J. Black, May 8: West End Forehead: The bottom part of this working is very poor, but there is such promising ore setting up in the roof, and kindly in its nature, that I have set the men on to rise up into it and see what it is like. No. 2 stope continues about the same as it has been these last few weeks—poor, and yet too much ore to think of leaving it.—No. 3: The men in this working have commenced stoping down the south end; there are some strong leads of lead, and I think they improved it a little at the lower end, where their operations have been mostly confined to. This stope will get a fair quantity of lead ore, and open out the ground towards the rise. The dressings are getting away fairly satisfactory.

WEST ASHETON.—Joseph Garland, May 12: The lode in Martin's rise in the back of the 70 has been cut through to the footwall, and found to be 6 ft. wide, composed mainly of quartz, sprinkled with lead ore and blende. We have started a trial level east in the lode. The lode in the 60 end west is being stripped down for the whole width, 9 ft.; it is a very strong lode, and yields a good deal of blende and good stones of lead ore—saving work. There is no change in the No. 4 cross-cut in this level; the ground is hard and dry in the forebreast, and the indications of a lode ahead are not so good as they were. We shall suspend this driving after this month if no change occurs in the meantime. The stope in the back of the 50 west maintains its value of 2 tons of lead ore per fathom. The 40 west, which is being driven by two men, is without change. The Nos. 4 and 5 stoves in the back of this level are yielding a fair quantity of ore. The

No. 1 stope in the back of the 30 west is at present poor. The No. 2 stope in the same level yields from ¾ to 1 ton per fathom. Gundry's rise being high enough for a level, a 30 west has been started from the top of the rise; the lode where last cut into was about 1 ft. wide, and yielded saving work for lead ore. Sinking in the engine-shaft has fairly commenced; the men refused their bargain for a few days at the beginning of the month, but afterwards accepted it, and are now working regularly. There is no particular change in the two tribute pitches now working. We sampled on the 5th inst. (for sale to-morrow) 45 tons of lead ore.

WEST CARADON.—N. Richards: Gilpin's lode, in the adit level, west of main cross-course, is getting into more settled ground, and again producing some rich copper ore. We have suspended the driving west on Vercoe's lode, at the 50, for the present, and put the men to open east on Vivian's north lode at this level, where we have a branch of ore; but we expect to have to drive a short distance before we reach the shoot of ore gone down in the bottom of the level above (the 38). Vivian's lode, in the 50 west, will yield from 1½ to 2 tons of copper ore per fathom. We have stopped the rise in the back of the 38 for the present, as we could not work to advantage, the rise being so near the end. The men from the rise we have placed to drive the 38m. level west, where we may expect a good lode.

WEST DEVON GREAT CONSOLS.—George Rowe, May 12: Our prospects in opening up the great south or Edith's lode are exceedingly cheering; in every pit we find the same class of rich copper gossan impregnated with oxides of copper of the most flattering description going away in the western ground. We have also discovered the great cross-course about the centre part of the set, and shall continue to open on its course to the junction of the different lodes, which are five in number, particularly on the south discoveries, where we calculate on good results very shortly.

WEST HOLWAY.—R. Rowlands, May 13: New Shaft: As was generally expected in driving the 80 yards level east we have made a splendid discovery; the lode is of a highly favourable character, containing rich lead ore, worth nearly 2 tons of the latter to the fathom, and is evidently going to improve. I expect a long run of profitable ground here. In the 80 west we have likewise struck into good lead ore, and the lode looks well.—Ram Shaft: We are making good progress here, and have come across some splendid stones of lead ore in widening the shaft. Our prospects are excellent.

WEST KITTY.—W. Vivian, May 10: The rise in the back of the 84, east of shaft, is 2 ft. wide, and worth 5s. per fathom for tin, with every appearance of further improvement. In the 72, driving east of shaft, the lode is 3 ft. wide, and worth about 11s. per fathom. In the 60, driving east of rise, the lode is 4 ft. wide, and worth about 7s. per fathom. In the 72, west of shaft, the lode is 3 ft. wide, very kindly in appearance, and producing a little tin, but not to value. We shall raise a parcel of tin ready for the smelting-house in about a fortnight from this time.

WEST WHEEL PEEVOR.—W. T. White, Jas. Pryor, May 8: Setting Report: Mitchell's engine-shaft was completed to the 45 about a fortnight since, and cross-cutting to the lode was commenced at once; the men are making very good progress in driving, being in already between 2 and 3 fms. Winze to sink in the bottom of the 35, at 8s. 10s. per fathom; lode opening up very satisfactory, worth 12s. per fathom. The 35 to drive west, at 7s. 7s. per fathom—this portion of the lode we discovered in the cross-cut at this level last month—and have driven 16 ft. west on the same; the lode now in end is very much improved, being fully 3½ ft. wide, and worth about 10s. per fathom. This ground will pay when opened. We have again resumed the driving of the cross-cut north, at 5s. 10s. per fathom. We feel satisfied we are now getting into a fine run of tin ground.

WEST WHEEL TOLGUS.—May 12: The lode in the 155, west of Taylor's shaft, is 5 ft. wide, yielding 1 ton of copper ore per fathom. The lode in No. 3 winze, in the 145, west of shaft, is 3 ft. wide, yielding 1½ ton of ore per fathom. We expect to communicate this winze with the 155, in about a night's time. The lode in the 125, west of shaft, on the south part, is 3 ft. wide, yielding occasional stones of copper ore.—Richards's Shaft: The lode in the 105, west of shaft, is 2 ft. wide, composed of spar and spots of copper ore. The lode in the 95, west of shaft, is 5 ft. wide, yielding 4½ tons of ore per fathom, and looking very promising to continue a good lode. The rise in back of this level is yielding 3 tons of ore per fathom. The lode in the 85, west of shaft, is 3 ft. wide, yielding a little saving work for copper ore. We have not met with any lode or branch in the 75 cross-cut driving south. The lode in the 65, west of shaft, is 2 ft. wide, composed of spar and white iron, and getting better defined. The stoves continue to yield about their usual supply of copper ore. We had a breakage last Sunday to the balance-bob in the 40, at Richards's shaft, but we did not suffer much hindrance, as everything we required for the repairs was on the mine, and the water was soon in fork for the men to resume their work in the bottom levels. We calculate to sample on Tuesday next about 250 tons of copper ore.

WHEEL COATES UNITED.—W. H. Martin, May 11: The mine is drained 3 fms. below the 50. The shaftmen are repairing and fixing new footways. In the stope in the back of the 50 west, in bottom of the 40, we have six men breaking good quality tinstuff. To-day we set a pitch in the back of the 50 east, to six men, at 15s. in 1s. We are clearing the 50 east preparatory to sinking a winze to communicate with the 70; the sinking will be started the latter part of the week. At surface the repairs to the stamps are progressing favourably; we have the principal casting and new ironwork on the mine, and we have also fixed up the ladders on the first floor. On the second floor, the ladders are pushed on with the utmost speed to the skip-road. We have fixed several hand stands, and replaced new runners, and have several more to put in. The masons hope to finish the building of the engine-house walls for the winding-engine by the middle of next week. The boiler and principal parts of the winding-engine are delivered on the mine.

WHEEL OREBOR.—J. Andrews, Henry Phillips, May 11: The lode in the 120 east is worth 30s. per fathom. The lode in the 120 west is worth 25s. per fathom. The lode in the 120, west of winze, is worth 50s. per fathom. There is no change in the 103 east. The lode in the rise in back of the 103 east is worth 8s. per fathom. The new lode in the 103 east is worth 15s. per fathom. No. 1 stope, in back of the 103, on new lode, is worth 60s. per fathom. No. 2 stope, in back of the same level, is worth 30s. per fathom. The winze sinking below the 103 is worth 40s. per fathom. We continue to make fair progress in rising in back of the 72 against new shaft. There is no change in the 48 east, nor in the new shaft sinking below the 45.

WHEEL GRENVILLE.—T. Hodge, May 11: The 178 east end is driven nearly 2 fms.; the lode at point of intersection, and for 6 ft. of cross-cut, is worth 9s. per fathom—the present end produces low-price tinstone. The 165 west end produces low-price tinstone. The 165 east end is worth 8s. per fathom. The 165 west end, east of eastern cross-cut, is worth 12s. per fathom. The 165 north cross-cut is passing through lodestuff, but we have not yet reached the tin-bearing part of the lode. The stope in the back of the 165 is worth 10s. per fathom. The winze below the 150 is worth 12s. per fathom. The lode in the 150 east end is sinking out in the stope in the bottom. The stope in the bottom of the 150 east is looking very well; worth 13s. per fathom. Two stoves in the back, about 10 fms. behind the 150 end, are not looking quite so well; worth together 25s. per fathom. Angora's stope is worth 9s. per fathom. Woolcock's stope is worth 12s. per fathom. Thomas's stope is worth 8s. per fathom. Laurence's stope is worth 7s. per fathom. Sewell's stope in the bottom of the 140 is worth 8s. per fathom. The 140 end is showing a very good appearance; worth 10s. per fathom. Southcott's stope in the back of the said level is worth 10s. per fathom. The stope in the back of the 140 is worth 10s. per fathom. Mose's stope is worth 7s. per fathom. I expect the new axle will be brought on the mine this evening.

—T. Hodge, May 12: We have the new axle, &c., here; and are engaged in fixing the same.

WHEEL JANE.—R. Southey, May 13: Since my last good progress has been made in driving the cross-cut south at the deep adit level; this cross-cut, it will be remembered, was started in order to intersect a south lode of great promise which made large quantities of tin in the adjoining mine. The end is looking out in the water there; also several branches have been seen, and their appearance in the end, all of them containing minerals. We expect the lode is not far off. Our stoves underground are looking much the same as when last reported on, and are producing the usual quantity of tin. Surface operations are working very satisfactorily, and judging from present appearances we shall raise the quantity of tin promised at the last meeting—60 tons.

WHEEL JEWELL.—Francis Gundry, May 8: We set the following bargains to-day:—The engine-shaft to sink below the 60, by nine men, at 28s. per fathom; lode large, producing good stones of yellow copper ore. At the 60, east of engine-shaft, we set to four men, at 5s. per fathom, to cross-cut, the lode, as the main part has not been seen for the last 6 fms. driving. When last seen it was of a promising character, and as the level above was driven through a long run of copper ore we expect to meet with a similar lode in cross-cutting at this point. It will take about a fortnight to do. At the 60, west of the engine-shaft, we are driving by the side of the lode with six men, at 5s. 5s. per fathom, so that we may communicate this end with the No. 1 winze below the 50. The lode in the said winze produced from 3 to 4 tons of copper ore per fathom for the last 5 fms. sinking. When this communication is made we shall be able to stop the back of this level. The 27, east of the new whim shaft, is set to six men, at 2s. 15s. per fathom; the lode is very large, composed of gossan, iron, and muddle, and yielding some copper ore. We have communicated the new whim shaft to the 27, which has already improved the ventilation, and expect to complete this shaft to the 50 by the next setting day, when the mine will be sufficiently ventilated, and by this time we hope to have our pitwork changed to the plunger lifts, so that we shall be able to carry on the operations with vigour.

WHEEL PEEVOR.—W. T. White, T. C. King, May 8: Setting Report: The engine-shaft will be sunk to the 90 in another fortnight, when we shall at once cross-cut to the lode at that level, the lode being about 4 fathoms distant; we expect to cut it in about two or three weeks. The 80 to drive west at 6s. per fathom; lode worth 38s. per fathom. The 70 to drive west at 6s. per fathom; lode worth 15s. per fathom. The 70 to drive west, on north lode, at 5s. 10s. per fathom; lode worth 6s. per fathom. The 70 to drive east of cross-cut, on middle lode, at 6s. per fathom; lode improving, worth 22s. per fathom; we are laying open good ground here. The cross-cut to drive north at the 60, at 6s. per fathom. The winze to sink in the bottom of the 80 west, at 6s. per fathom; lode worth 10s. per fathom. The cross-cut to drive south at the 60, to intersect the new lode recently cut in the engine-shaft, at 4s. 10s. per fathom. The 48 to drive east, at 5s. 10s. per fathom; lode worth 12s. per fathom. The rise in back of this level at 5s. 10s

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The Mining Market: Prices of Metals, Ores, &c.

METAL MARKET—LONDON, MAY 14, 1880.

IRON.	£ s. d.	£ s. d.	TIN.	£ s. d.	£ s. d.
Pig, oms, f.o.b., Clyde.	2 6 3	2 5 6	English, ingot, f.o.b.	32 0 0	33 0 0
" " " " " "	2 5 6	2 5 6	" " " " " "	33 0 0	34 0 0
" " " " " "	2 5 6	2 5 6	" " " " " "	34 0 0	35 0 0
" " " " " "	2 5 6	2 5 6	" " " " " "	35 0 0	36 0 0
" " " " " "	2 5 6	2 5 6	" " " " " "	36 0 0	37 0 0
" " " " " "	2 5 6	2 5 6	" " " " " "	37 0 0	38 0 0
" " " " " "	2 5 6	2 5 6	" " " " " "	38 0 0	39 0 0
" " " " " "	2 5 6	2 5 6	" " " " " "	39 0 0	40 0 0
" " " " " "	2 5 6	2 5 6	" " " " " "	40 0 0	41 0 0
" " " " " "	2 5 6	2 5 6	" " " " " "	41 0 0	42 0 0
" " " " " "	2 5 6	2 5 6	" " " " " "	42 0 0	43 0 0
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At the works, 1s. to 1s. 6d. per box less for ordinary; 10s. per ton less for Canada; 1X 5s. per box more than 10 quoted above, and add 5s. for each X. Terne-plates 2s. per box below tin-plates of similar brands.

REMARKS.—The metal markets opened this week in a very depressed condition, buyers being particularly scarce, whereas sellers manifested great determination to press sales; the consequence was considerably reduced prices only could be obtained. On Wednesday, however, a more healthy tone pervaded our markets, and sellers becoming alive to the needless sacrifices they were submitting to, and many buyers also finding that at ruling quotations there could be little or no risk in effecting purchases, came forward and showed a good deal of disposition to make contracts. This was the means of creating firmness in the quotations for most metals, and in some instances slightly higher prices were paid than could be realised on the previous day, and since which prices have fluctuated more or less, with a very fair amount of business being transacted. There has at present been insufficient time to say positively whether the turning point of the retrograde movement has taken place, but that the future must sooner or later see a very marked change for the better becomes daily more and more apparent, as the prospects, on the whole, cannot be considered otherwise than of an encouraging nature. There will not now, however, be much more business transacted until after the Whituntide holidays, but on the reopening of the markets sufficient time will probably have been allowed for them to regain their equilibrium, and they will then doubtless assume a very different aspect from what they have done for several weeks past. It is stated by some that as we are now approaching the summer quarters of the year, and that on account of the trade having gone so far without showing any recovery we shall have to wait until the autumn before any particular improvement takes place; but as the trade has lately been subject to great irregularities, it is quite possible that the order of things may be reversed, and in proportion to the falling off in the demand, the ensuing summer may fully make up for the deficiencies of the present quarter, and in that case there would naturally be considerable activity, which would doubtless lead to the realisation of higher prices. Considering the early part of the year, the spring demand has not attained the dimensions which was expected of it, and therefore if those reports are reliable it follows that most likely large shipping orders are being kept in abeyance, and will be put in hand as soon as ever stability is restored to our markets.

COPPER.—On Monday and Tuesday this market was in a most sensitive and depressed condition, and holders pressed sales to an enormous extent, which resulted in reducing quotations for Chili bars to 55l., or a reduction of 2l. per ton upon the closing price of

last Friday, but on Wednesday more tone was given to the markets, and as buyers appeared less shy to effect purchases, prices were advanced to 56l. 10s. cash; but on Thursday prices again receded to 55l. 10s., at which a considerable amount of business was transacted, and the market closes to-day at this figure. The present position of this market as regards price is very little better than it was in the summer months of last year, at which period the depression in trade was more seriously felt than on any previous occasion ever known in commercial circles, and it was impossible to foresee its end; and even when it did terminate there were many people who declined to believe in the genuineness of the revival, and it could not be wondered at, for several false starts had been attempted during the previous five or six years, and which always terminated unsuccessfully, but numerous causes from time to time contributed to the downfall of the market; and, in fact, it was owing to a powerful combination of circumstances, the disastrous character of which, so closely following upon one another, was probably never before realised, and extended its injurious influence not only to copper, but to commerce generally, and depreciation was then the characteristic feature of all staple commodities, since which a great change has come over the face of things, and it must be admitted that a considerable improvement in business has been effected; and, considering the course has been pretty well cleared, and scarcely any obstacle now remains to the due development of trade, there is but little reason to expect that there will be any material delay to prevent the markets from regaining their ordinary condition. After the rush which took place in the autumn a reaction is but natural. In fact, at the time when the markets were moving up so rapidly we repeatedly pointed out that a reaction was inevitable, but that when it might occur there could be no certainty, as speculators invariably carry the markets to extremes, and it would almost appear that in a similar proportion as prices were then carried absurdly high so they may now be carried unnecessarily low.

The chief movers of the markets seldom care to be moderate in their actions, as wide fluctuations afford them a greater chance of making larger differences. Nevertheless, sudden and violent changes are very detrimental to legitimate trade, but however much the present state of affairs may tend to encourage those whose object it may be to prolong a state of indecision, yet we cannot but view the future prospects in a hopeful and sanguine manner. A permanent recovery in trade is seldom or never effected all at once, and a little interruption after so much speculation is, perhaps, rather beneficial than otherwise, as it affords the bona fide buyer another opportunity of securing his requirements at extremely low rates, and the decline will, doubtless, have the effect of putting consumers and shippers in a safer position, but they must be on the alert, and buy while they have the chance, irrespective of the operations on the market, for present prices are exceptionally low, there being, as we have already stated, but one previous occasion when a comparison can be made, and the "bears" are only depressing prices with the object of covering in at some later date, when another rush upon the market may be looked for. The only feature that is dwelt upon in favour of lower prices is the viable stock, but it must not be forgotten that the increased accumulations began by the shipments of Mr. Edwards's Valparaiso stock to this side, and, therefore, it is now taken into account, whereas before it was not, although in existence.

The statistical position of this metal is now pretty accurately compiled, and is much better known than it was in former years, and there is also this to be said in regard to the stock that it is probably kept more before the eyes of the public than before on account of consumers generally having given up the practice of holding private stocks; and, consequently, as soon as ever an improved consumptive demand sets in an immediate impression must necessarily be made upon public stocks. While money continues cheap and abundant prices are low, and a large stock can be easily maintained without incumbrance, and may even be less expensive than a light stock at a time when money and prices are dearer. Holders should bear in mind these facts, and direct any of their influences which may be brought to bear upon the market. Investors should closely watch their opportunity, and purchase without hesitation; for although present appearances may not assume an upward tendency, yet there can be no doubt that prices will be ultimately elevated to a higher standard. Prices are really so cheap that a great stimulus must be given to consumption, and there can be no excuse for delaying the execution of orders. Producers would do well, in their own interests, were they to regulate future supplies with due care to the position and requirements of the Sellers, as Sellers possess more power than they seem to exercise in the exhibition of a little firmness on their part would probably be the means of arresting any further fall in prices.

IRON.—The cheap prices which are now being taken are to a certain extent encouraging a few buyers to make purchases, nevertheless the downward tendency does not appear yet to have been arrested, and sellers in order to effect sales have this week submitted to further reductions. The price of both the raw material and manufactured has undergone a sensible fall, and although not so low as was touched in the depression of 1873, quotations for all descriptions are extremely moderate, and well worthy of the consideration of buyers. It is quite evident that the complete change which has taken place on the American markets during the last month or two is the chief cause of the disorganised state of our markets at home, but unless steps are taken to come to terms with that country, and during the last month with regard to the extension and formation of railways together with increased agricultural pursuits, be altogether false, there is every reason to expect that American buyers will again come forward and purchase in large quantities, as the shipments which have been effected to that country, although large, and doubtless sufficient for present requirements, must sooner or later be exhausted, and if the future wants of America be as large as represented then there is every probability that buyers for that continent will have very shortly to give out from the extensive character of the business which they are now exercising, and that their quietude at the present time is purposely intensified so as to unsettle the markets that they may be thereby enabled to secure their contracts on more advantageous terms than they otherwise would be able to do. A recent cablegram from New York states that the iron market in that country continues to decline. The demand is very dull, and that for Scotch pigs becomes quieter and quieter, and the quotation for No. 1 Gartsherrie is 23 50; Glen-garnock 21 10s; Coltness, 24; and Eglinton, 22, which, in comparison with the last advances, shows a reduction of 5s. on all except Gartsherrie, which is quoted at 24 10s.

There is very little doing in hematite pigs, and it is reported that the stocks on hand are sufficient to meet the requirements of the trade for some time to come. There is, however, a fair amount of business being transacted in scrap-iron and rails; nevertheless quotations still tend in buyers' favour, both being quoted at 87, or a reduction of 4s. per ton upon previous prices. Mr. Sherman, in his speech at New York on the 11th inst., remarked that the country had entered upon a period of great prosperity in every department of industry and commerce, and before coming to the United States he went on to state that the building of iron ships had made great progress in the United States during the last few years, and should be further promoted; and he therefore urged the merchants to make every effort to attain this great object, and thus complete the triumph of American industry. The Glasgow warrant market opened this week flat, and prices receded from 46s. 6d. to 45s. on Monday, and on Tuesday 6d. less was accepted, improving on Wednesday and Thursday to 45s. 2d., and closing to-day at 45s. 3d. to 46s. 6d. The shipments last week foreign and coastwise were 14,799 tons, against 13,000 on the preceding week of last year, which brings the total shipments from Christmas to date this year to 238,897 tons, with 115 furnaces in blast, against 186,506 tons last year, with 86 furnaces in blast. The stock in public stores in Glasgow on the 8th inst. was 439,651 tons. Business on the Middleborough market is reported slack, and lower prices have been accepted. The stock in public stores is said to have still further been reduced by about 1100 tons, bringing the total stock in Connal's stores to 82,338 tons.

The unsettled state of the Scotch markets continues to produce an unhealthy feeling over the market in the second-hand parcels of No. 1 Scotch pig, and the price of this metal is generally not quoted under 40s. The shipping demand is said to show no material falling off, and the exports of pig-iron last week is estimated at 19,157 tons. Large clearances are being effected to Scotland, owing probably to the reduced rates, whereby Scotch buyers are enabled to purchase upon advantageous terms. There are still large orders to be executed for America, but it is not expected that the shipments this month will be so large as they were last. Prices of manufactured, like those for the raw material, continue to decline, and common bars here are said to be 46 to 47s. 6d., against 47s. 6d. and 48s. 6d. last week. The plate and bar mills are said to have been put into active employment, the men having resumed work under the sliding scale of wages, pending its being brought under the consideration of the arbitration board. Quotations at Wolverhampton for both the raw and manufactured material are reported to have become weaker. No. 3 being quoted at 37s. 6d., and hematites from 40s. to 50s. under cost. Makers of manufactured are said to have sought applications for quick delivery, but have rarely been successful. The unsettled state of prices in the Sheffield markets is said to be causing a marked depression in business in that district, and buyers are holding off, and decline to give out fresh orders as long as they think there is any prospect of placing them on more advantageous terms hereafter. Hematite pigs are quoted at 4l., and Bessemer is only fetching 7l., and prices appear to be still weakening. A very restricted business only is said to have been transacted on the Birmingham market, owing to the approach of the holidays, when several of the mills will be closed for some few days. Buyers have endeavoured to place orders at lower rates, but have met with little success, as many sellers are said to have agreed not to make any further concessions for the time being, and the markets may in the meantime be somewhat depressed, but some makers appear sanguine that the present lull will probably not last much longer, and in some instances manufacturers have become slightly firmer in their quotations. There is still a tolerably good demand for rails, and prices are maintained, and the price of merchant bars is firmly held, while pigs are steadier, but a marked falling off is reported in the price of scrap-iron. Large clearances have been made, nevertheless they are not quite up to the average, the chief quantities being shipped to the United States and Brazil.

TIN.—Like all other metals the market opened this week in a very dull and depressed condition, and sellers could only realise much lower rates than were quoted last Friday, business in fine foreign having been done on Monday at 78l. to 76l. cash. On Tuesday a further fall took place in quotations, 75l. having been accepted. On Wednesday there was more tone perceptible upon the market, and 75l. 10s. was paid, and yesterday 76l. 10s. cash and 77l. to 77l. 10s. forward was realised, but to-day prices have again been reduced to 75l. 15s. A rise in prices just now appears fully justifiable, for according to the last statistics the visible stock has been greatly reduced owing to a limited supply and good deliveries, and recent advices from America show that there is now more inquiry on that continent for tin-plates, and if the demand continues to increase for tin-plates it necessarily follows that the consumption of tin must be augmented, and prices would, doubtless, be proportionately advanced.

LEAD.—This market remains almost neglected, and prices continue to weaken, and as both the consumptive and shipping demand is reported to keep limited there appears but little prospect of any material recovery taking place for some time to come.

SPELTER.—Inquiries are scarce, and prices, although showing but little change from last week, are decidedly easier, and must be reckoned entirely nominal, as the business which is being transacted in this metal, for both Silesian and English, is extremely limited.

STEEL.—There is no material change in this market, either as re-

gards price or demand, the shipments which are being made being chiefly in completion of old orders.

TIN-PLATES.—There is a slight improvement reported in the American demand, and as a few buyers appear more inclined to effect purchases, prices in some instances have shown symptoms of strengthening.

QUICKSILVER has been very steady throughout the week at 6l. 15s.

MESSRS. FIXLEY AND ARELL—GOLD: There have been no transactions at the Bank since our last circular of the 6th inst. The demand for the Continent has revived enough to clear the market of all bars that were offering, and a few orders are still open. The only arrivals are 5000l. from the Brazils and 2200l. from the West Indies. The P. and O. steamer takes 8950l. to Malta and India. **SILVER:** The market has been very steady during the week, and the variations in price have been small, beginning at 52 1/2d. The supplies offering at the close of last week were sold at this quotation, and to-day transactions have taken place at 52 1/2d. The arrivals have been—31,580l. from the Brazils; 3000l. from New York; 23,520l. from the West Indies=58,100l. The P. and O. steamer takes 105,400l. to Bombay, and 40,000l. was sent from Venice to India on the 7th inst.

The MINING SHARE MARKET has been affected this week by two or three depressing circumstances, and has been particularly dull and inactive. There has been the settlement of a heavy fortnightly account, and a serious fall in metals, and coming together the markets have been more than usually influenced by them. It always happens on settling days that differences have to be adjusted, and sales effected at almost any sacrifice, and when they are forced for sale at a time people are frightened at the aspect of the metal market, the natural consequence is that it is difficult to sell at all; quotations are put down, and become in a great measure merely nominal.

TIN.—As we suspected last week the smelters put down the standard for ore on Monday 5l. per ton, and there was a general fall in the prices of shares; many, in fact, have become almost unsaleable. But such is the fickle nature of the speculation now going on in the tin market that there is no telling how soon another change may take place for the better. Carn Brea have fallen to 80, 85; Dolcoath, 55 to 57; Cook's Kitchen, 9 to 9 1/2; Blue Hills, 4 to 4 1/2; East Pool, 33 to 35; East Lovell, 2 to 2 1/2; Polrose, 2 to 2 1/2; South Condor, 11 to 12; South Frances, 17 to 18; Tincroft, 18 to 19; West Basset, 18 1/2 to 19; West Frances, 17 to 18; West Peever, 7 to 7 1/2; Wheal Agar, 6 1/2 to 7; Wheal Basset, 4 to 4 1/2; Wheal Kitty, 5 to 5 1/2; Wheal Peever, 28 to 29; Wheal Uny, 4 1/2 to 5; West Kitty, 1 1/2 to 2; West Phoenix, 2 1/2 to 2 1/2; Wheal Grenville, 1 1/2 to 10; Wheal Jewell, 1 1/2 to 1. **COPPER** declined early in the week to about 55l., a fall of something like 19l. per ton from the highest point reached and 7l. on the month. This affected the share markets, and shares suddenly became lower all round, and less marketable. The last day or two, however, copper has somewhat recovered in price. Devon Great Consols are quoted 12 1/2 to 13 1/2; Wheal Crebor, 3 1/2 to 4 1/2; Bedford United, 3 to 3 1/2; East Caradon, 2 1/2 to 3; East Crebor, 17s. 6d. to 20s.; Gunnislake (Clitters), 4 1/2 to 5 1/2; Hingston Down, 17s. 6d. to 22s. 6d.; Mellanear, 5 to 5 1/2; Marke Valley, 35s. to 40s.; Morfa Du, 20s. to 25s.; New Cooks Kitchen, 6 1/2 to 7 1/2; North Penstruthal, 1 to 1 1/2; Parys Corporation, 25s. to 27s. 6d.; Prince of Wales, 14s. to 16s.; South Crebor, 1 to 1 1/2; South Penstruthal, 10s. to 15s.; West Caradon, 3 to 3 1/2; West Devon, 3 1/2 to 3 1/2; West Seton, 22 1/2 to 25; West Tolgus, 58 to 60. Mona, 13 to 15; the statutory meeting was held this week, and the mine is reported as opening out well.

LEAD is particularly dull, and there is scarcely anything doing in lead shares, the prices of which are nearly all nominal. Van shares, 18 to 19; the cross-out towards the north lode is making satisfactory progress, and the ground improving. Roman Gravels 10 to 10 1/2; the mine has sampled 200 tons of lead ore this week. No change in the mine. Tankerville, 4 1/2 to 5; Great Laxey, 18 to 19. South Darren, 3 1/2 to 4; they have begun to sink the shaft below the 110 in lode worth 30l. per fathom. Other points of the mine looking the same. Pandora, 17s. 6d. to 22s. 6d. The shaft is down about 7 fms. below the 33, and the lode in the bottom contains a strong mixture of blende and stones of ore. East Roman Gravels, 15s. to 17s. 6d.; the sinking below the 97 is begun. The 86 is worth 2 tons, and the winze below the 75 3 tons per fathom. Glenroy, 17s. 6d. to 22s. 6d.; the lode in the 108 north is large, and shows lead and blende.

Caron, 1 1/2 to 2; Crosswood, 1 to 1 1/2; Frongoch, 4 1/2 to 5; Grog-winnian, 2 1/2 to 3 1/2; Harlington, 1 to 1 1/2; Mawston, 1 to 1 1/2; Red Rock, 1 1/2 to 2; West Wye Valley, 1 to 1 1/2; New Wye Valley, 1 1/2 to 1 1/2; Yst-with, 1 1/2 to 1 1/2. Gwern-y-Mynydd, 5 to 5 1/2. Very excellent progress is being made in the various operations at this mine, and the prospects are most cheering. West Holway, 28s. 6d. to 32s. 6d. The lode in the 80 east is reported worth 2 tons of lead per fathom. Derwent, 24 to 25; Aberllyn, 1 to 1 1/2; East Craven Moor, 8 to 9; East Van, 3 1/2 to 4; Gorsedd, 2 to 2 1/2; Herodsfoot, 3 1/2 to 4; Leadhills, 2 1/2 to 3; Ladywell, 1 1/2 to 2; Minera, 11 to 12; North D'Eresby, 1 1/2 to 1 1/2; Penant, 3 to 3 1/2; Pen-y-Orsedd, 1 to 1 1/2; West Chiverton, 1 1/2 to 1 1/2.

FOREIGN MINES.—Almaden and Tiritio, 10s. to 12s. 6d.; Cape Copper, 37 to 38

the *Mining Journal* in December), formed with a capital of 100,000l., in shares of 17. each, are inviting subscriptions for the second issue of 60,000 shares, at 5s. per share premium, such premium to form a reserve fund. The prospectus, which will be found in another column, states that the company have secured the very valuable freehold estates of Lackade and Madutella, in the Wynad district of Southern India, the very heart of the gold-bearing region, comprising an area of about 300 acres, for a sum of 40,000l., payable 20,000l. in cash and 20,000l. in shares, at the option of the company. The company's superintendent reports:—"Main reef not tapped yet. There is gold here, but have only tried the outcrop. Specimens of the quartz from Madutella property assayed upwards of 10 dwts. of gold to the ton." The prospectus adds, that at the earliest opportunity the directors purpose erecting sufficient machinery to crush 150 tons of quartz per day, which for 300 working days yielded 10 dwts. of gold per ton, at the selling price of 3l. 15s. per oz., amounts to per annum 84,375l., from which must be deducted cost of crushing 45,000 tons, at 12s. 6d. per ton, 23,250l.; other expenses (say), 5s. per ton, 11,250l.; leaving a net profit per annum of 45,000l., equal to a dividend of over 40 per cent. on the entire capital of the company. As corroborative evidence of the value of these estates reference is made to Mr. R. Brough Smyth's report. He states that the position approximately of 90 outcrops of quartz veins, and west of Chooladi, intersecting a line about 14 miles in length, there are said to be 11 distinct reefs, Chooladi being within easy distance of Lackade. Again, gold has been found on the south near Eddacura, and on the north near Nallacottah; on the west near Vytel, and on the east as far as Boilingbrook—that is to say, over an area of more than 500 square miles. It is remarked that the Vytel referred to is in the immediate vicinity of the Gold Company's estate of Lackade and Madutella. The prospects of the enterprise are considered to be highly encouraging.

The South Devon United Copper Mines are reported to be now in full operation, and the underground bargains are laying open in the four lowest levels a rich and lasting mine. The first sampling, of about 170 tons, took place on Monday, for sale on Thursday next at Turo.

Missouri Lead, 10 to 11; the manager, Capt. Champion, reports (April 22)—"St. Clair Mine is opening up very satisfactorily indeed. I think we can start on a low estimate 100 tons of ore per month at this point. In fact, every leading part yet discovered and put into working order looks beyond my expectations. The stope above the 15 ft. level continues to yield 2 tons of ore per fathom. At the 245 ft. level we are preparing to drive the level and also to stope the lode above the level. The ore will yield about 1½ ton of lead ore per fathom. The lode in the bottom of the mine at present is 14 in. wide, composed of red clay and solid tons of galena, and will yield about 3 tons per fathom of pure ore. We have cut the lode in the level driving south from the Master shaft; it is about 8 in. wide, and composed of sulphate of baryta and spots of lead. We shall drift south on the lode, which will doubtless improve rapidly as we leave the disordered ground and approach the richer portions of the lode. Work will be continued at the Valley shaft as soon as an arrangement can be made for so doing. Work is being pressed on at Bald Hill, where the lode is most promising for making rich deposits of ore. We shall have a large output from St. Clair, Master shaft, and Bald Hill when we get fully at work at all these points." Another report, dated April 22, says—"The work done in the past few days in the St. Clair Mine has still further demonstrated the great strength of the ore deposits. After we have sunk the shaft and opened out new levels, and have a good force of miners at work, the mine will yield 7 to 10 tons of ore per day; the strength of this portion of the lode is very satisfactory evidence of its general character throughout. We have a large pile of ore on the surface ready for crushing, and are raising ore regularly."

Richmond, 16½ to 16¾; the usual telegram from the mines at Eureka, Nevada, states that the week's run was \$65,000 from 990 tons of ore. During the week the refinery produced doré bars to the value of \$50,000. The report of the directors prepared for the forthcoming meeting, and which is fully referred to in another column, is highly encouraging. The mining profit for the year was 143,063l., and the net profit 134,512l. (equal to 50 per cent. on the company's total capital), which, added to the undivided profit brought forward, gives an available balance of 154,030l. 18s. 4d. Out of this the shareholders have received three dividends of 7s. 6d. per share each, and are now to have another of 10s. per share, making a total for the year of 1l. 12s. 6d. on each 5l. share, or 32½ per cent. per annum. This absorbs \$7,750l.; 1424l. 10s. 2d. has been paid for legal expenses in Eureka, 44,416l. 3s. 10d. is to be added—a very wise proposition—to the "reserve for contingencies and working capital" in order to raise that fund to 50,000l., and 20,400l. 4s. 8d. is to be carried to credit of next account. The company may well be congratulated on their strong financial position, the remunerativeness of their enterprise and their brilliant prospects. The manager (April 21) reports that the cross-cut from the end of the 200 main drift is now drifted in ore 41 ft., the end being now in very fair quality ore; they are now taking steps to ascertain the size of the ore body. The 400 north from No. 15 has been extended 15 ft. on a well-defined fissure, with favourable indications for ore. The rise in back of No. 15 chamber is up 118 ft. in high grade ore. The 500 north from No. 12 gives very favourable indications for ore. A drift has been started from the top of the rise in back of No. 14 chamber in a 7-ft. vein, which looks favourable to open to an ore body. The chambers are all looking very well, and turning out a large quantity of high grade ore. The furnaces are in good working order, and smelting the usual quantity of ore.

A correspondent appropriately signing "Nemo," but who does not give his real name, and may, therefore, have no interest in the concern, suggests that a large dividend should be declared instead of securing the 50,000l. reserve fund, and carrying forward the 20,000l. The shortsightedness of "Nemo's" suggestion is so obvious that it is much to be hoped it will receive no support whatever from shareholders, who would surely have much subsequent cause for regret. Let all support the directors, and avoid killing the goose for the golden egg.

Ruby, 9½ to 9¾; the telegram received by the company shows that the ore smelted for the week was 210 tons, against 65 tons last week. The 210 tons are estimated to represent a net money value to the company of about 1000l., and as the monthly (not the weekly) costs are under 1000l., it appears that a handsome monthly profit is now being made, and this is regarded as an extraordinary circumstance, having regard to the fact that the discovery on which they are now working was only made about two months ago. Information has been received that on one of the company's mines—the 12 ft. level—a demand of 150 ft. a body of ore from 225 to 300 per ton has been cut. This mine is reported to have been let on tribute to Mr. Kelly, and he has yet 12 months of his time to run. The company receives one-fifth. The mines generally are considered to be opening up well.

Flagstaff shares are still marked in the Official List as having been dealt in—to-day at 1½ and 1 7-16, and the closing quotations are marked 1 to 1½. There can be no doubt in the mind of anyone acquainted with share-dealing that these transactions are effected with a view to bolster the market, and outside shareholders—that is, shareholders who purchased shares with a view to receive dividends—cannot be too strongly cautioned against connecting themselves in any way with any scheme for resuscitating the concern. The company have no property or assets in America nor any *locus standi* in the American courts; the final decision of the Federal Supreme Court having been given, and the present proprietors holding as securely in America as the purchaser of property sold by decree of the Court of Chancery would hold in this country. But the present proprietors, and all syndicates connected with either party, should be as much shunned as the attempting resuscitators of the present company, because in the hope of drawing in the old shareholders they propose to give privileges which, if created at all, cannot legally be given.

Colorado United, 2½ to 2¾; the vast State of Colorado, which has an area of 104,500 square miles, a width of 280 miles, and a length of 370 miles, has lately been the scene of a reported massacre by Indians of some miners. The intelligent speculator, therefore, has thought it right to sell Colorado United shares upon the belief that this company's property was the spot in question—which, however, we are happy to say, is not the case. The returns to hand lately from the mine exhibit, it is true, a falling off in the net profit; we are informed, however, that with the summer months much greater activity will prevail, and a good dividend will be confidently expected.

Consolidated, 2½ to 2¾; the directors having at length sent orders to Capt. Drake to commence driving upon the discovery of ore made some time ago in the Eberhardt tunnel it is stated that this imperative operation is now about to commence. Shareholders, therefore, do not despair of being rewarded yet for their patience.

Nouveau Monde, 2 1-16th to 2 3-16ths; intelligence from this property by independent sources is reported to give a glowing account of the present position and future prospects of the concern, under the management of Mr. Oxland. It is said that the machinery is in full working order, and that the next mail will probably bring news of the first returns of gold.

Vineberg, 1½ to 2; the manager calculates that they have only 3 or 4 fms. to drive at the 160 metre level to cut the lode which has proved so rich down to the 140. Particulars of the workings will be found in the report published this week. At the Swansea Ticketing on Tuesday this mine sold 287 tons (21 cwt.) copper ore for 2433l. 18s. 6d., details of which are given in the account of the Ticketing. A parcel of upwards of 150 tons is at Swansea for sale next Ticketing, and a further shipment is preparing, and will leave the mine probably in the course of a few days.

Hultfall, 2 to 2½; the second annual meeting was held on Tuesday, when an interesting account of the mines was given and a satisfactory statement made as to their future prospects.

In Hydraulic or Gold Washing Companies shares business has been restricted. Advice received during the week gave accounts of one of the most violent snowstorms experienced on the Pacific Coast for a long time past. A considerable amount of damage has been done, and outdoor work is completely stopped in some parts. It will no doubt prolong the water season, but the immediate inconvenience is great. Placerville, 2½ to 2¾; the mine is reported to be looking well. The ore crushed at the company's mill in April was 700 tons, realising 7300l., which is considered a very satisfactory result.

In Lead Mine shares there has been no particular change, but the favourable feeling with regard to the future of lead continues. The great fear in this country has arisen from the anticipation that the

American production would exceed the consumption, and since it has become known that figures obtained from official sources show this view to be erroneous, there has naturally been a revival of confidence. Van, 18 to 19; the cross-cut to reach the north lode is being pushed on as fast as possible. The ground, it is stated, is rapidly changing for the better.

Mona, 14 to 16; the statutory meeting was held on Thursday, when an interesting account of the mines was given by Mr. T. F. Evans, recently one of Her Majesty's Inspectors of Metalliferous Mines, the Chairman, and others. A detailed report appears in another column.

Bwlch, 2½ to 3¼; the 100 east is reported to be improving, and producing beautiful branches of solid lead ore. The 110 will be reached, it is estimated, in about six weeks.

Gwyn-y-Mynydd, 5 to 5½; the operations at the various points are, it is reported, being steadily pushed, and the appearances are such as to create sanguine anticipations of an early success. Attention is called to the report, which appears in another column, and which is considered to be of an interesting character. Rapid progress is reported as being made in opening up Gwyn-y-Mynydd proper, and in explorations for lead at Fron-Fawng and Deborah.

Pateley Bridge, ¾ to 1; the 31 towards Fielding's vein is close to the lode, and the ground is becoming more congenial. Cleaver's vein is making better progress now the "nip" has been passed, and branches of spar with spots of lead ore are constantly intersected.

[The closing quotations being given in the Share List on the last page of the Journal it is unnecessary to repeat them here.]

At Swansea Ticketing, on Tuesday, 1089 tons of ore of 13½ average produce, and containing 149 tons 5 cwt. of fine copper, were sold for 8726l. 16s. 6d., being 8l. 0s. 3d. per ton of ore, 11s. 8½d. per unit, or 58l. 9s. 4d. per ton of fine copper in the ore, and an average standard of 80l. 19s. 6d. for 9 per cent. produce. Subjoined are the particulars of the two last sales:—

Date.	Tons.	Standard.	Produce.	Per ton.	Per unit.	Ore copper.
April 20.....	1385	829	1 6	9	45 15 4	12s. 10½d.....
May 11.....	1089	80	19 6	11 13½	8 0 3	11 8½

Compared with the last sale, the decline has been in the standard 8l. 2s., and in the price per ton of ore about 1l. 2s. 3d. There will be no sale on May 25.

TRAMWAYS.—The closing prices of this evening, as quoted by Mr. W. ABBOTT, of Tokenhouse-yard, are given in tabular form in the last page of the Journal.

GAS SHARES.—The principal business in these shares, according to this evening's report of Mr. W. L. WEBB, of the Stock Exchange and Finch-lane, has been in British, 34½; Bombay, 6½; Continental Union, 20; Commercial, 18½; European, 19; new, 19½ to 19¾; ditto, 13½; Gaslight, A, 17½ to 17¾; 4 per cent. debentures, 100½; Imperial Continental, 186½ to 189; Monte Video, 15½ to 16½; Para, 6¾; Rio de Janeiro, 26½ to 27½; South Metropolitan, A, 181 to 182; B, 182 to 183. Gas stocks dull. For closing prices see list on last page of Journal.

INSURANCE SHARES have, according to this evening's report of Mr. W. L. WEBB, of the Stock Exchange and Finch-lane, been dealt in as follows:—Alliance British and Foreign, 32½ to 33; ditto Marine, 28 to 28½; Commercial Union, 15½; Marine, 85; Indemnity, 100½ to 101; Lion Fire, 2½ to 3½; Merchants, 15½ to 16½; London, 64 to 64½; Railway Passenger, 8; North British and Mercantile, 52½; Phoenix, 80l ex div.; Rock Life, 8½ to 8¾; Royal Insurance, 25½ to 25¾; Universal, 12½ to 12¾. Alliance shares firm, others rather offered. For closing prices see list on last page of Journal.

The applications for the new Rio Tinto 5 per cent. bonds amount to over five and a half millions in cash and in 7 per cent. bonds sent in for conversion. The depositors of the 7 per cent. bonds are entitled to allotments to the extent of their full equivalent value, and therefore the cash applicants will only receive a moderate proportion of their subscriptions.

WEST HOLWAY.—A splendid discovery has been made at this mine at the 80 east, and shares are in demand.

NEW LLANFAIR.—Under this title a company has been formed to work a valuable mining sett on the same lodes as the great Llanfair mining property, which has paid enormous profits to its proprietors. The company is registered under the Limited Liability Acts in shares of 1l. each. From its geological position it is considered there can be little doubt of its proving a great success.

GOTHENBURG TRAMWAYS COMPANY.—The half-yearly meeting was held at the company's offices in London yesterday, when it was stated that the net earnings for the six winter months were sufficient to admit of a dividend at the rate of 8 per cent. per annum, free of income-tax, which was duly declared, leaving a balance of 329l. 4s. 7d. to be carried forward.

NORTH D'ERESBY MOUNTAIN.—The report received from the new manager shows that the mine is being pushed on with vigour. The prospects are very satisfactory and encouraging. The meeting is to be held in the mine on the 24th inst., when shareholders will have an opportunity of inspecting the property.

ROYAL SCHOOL OF MINES.—Mr. W. Chandler Roberts, F.R.S., Chemist of the Mint, has been appointed to the Lectureship of Metallurgy in the Royal School of Mines, rendered vacant by the resignation of Dr. Percy, F.R.S. Mr. Roberts will continue to hold his appointment at the Mint. Mr. Richard Smith, hitherto assistant-metallurgist, has been appointed instructor in assaying.—*Nature*.

A GENTLEMAN desires a SITUATION as PURSER or CLERK, or both combined, in a good MINE, either at home or abroad. A knowledge of Practical Mining and thorough acquaintance with all Mining Account Books. Satisfactory references. Address, "M. E.," Lion Hotel, Aberystwith.

WANTED IMMEDIATELY, an INTELLIGENT and ACTIVE CLERK, well versed in the General Routine of Office Work in a Mining Company. Apply to T. J. BUSE, 5 and 6, Great Winchester-street, London, between 12 and 2 to-day (Saturday), the 15th inst.

TO COLLIERY PROPRIETORS. WANTED, TO PURCHASE, MONTHLY SUPPLIES OF OLD PIT PROPS AND SLEEPERS. State price per ton and quantity to "Timber," Box 163, Post Office, Sheffield.

PROFITS FOR 1879—SEVENTEEN AND A HALF PER CENT. FOR IMMEDIATE DISPOSAL (at par) TWENTY SHARES (or less) of £25 each, £470s. paid, in the ROCHE-GOONBARROW CHINA-CLAY COMPANY (LIMITED). Apply to Mr. G. K. NORTH, 44, Queen-street, Wolverhampton.

THE DERWENT MINE. FIFTY FULLY PAID UP £4 SHARES FOR SALE. Price £3 each, or offer. Apply to "A. B.," 17, Argyle-square, London, W.C.

FOR SALE, a FIRST-CLASS SECOND-HAND 80 in. CORNISH PUMPING ENGINE, with several 11 ton BOILERS. Apply, WM. BENNETTS, Roskear, Camborne.

FOR SALE:—20 Bwlch Unit., £3. 30 So. D'eresby, £1 7s. 50 Parys Corpora., £1 8s. 50 Bettw-y-Coed, £1. 50 Hultfall, £2. 50 Flagstaff, £1 10s. 100 Cwm Pryf, £1. 20 E. Caradon, £2 15s. 1000 Devon Copper and 10 Crebor, £4 2s. 6d. 20 West Caradon, £3. Blende, 1s. 3d. 50 East Crebor, £1 1s. 15 Polrose, £2 10s. 500 Tyn-y-Fron, 10s. paid, at par, strongly recommended. No better investment in Wales.

Address, H. WILKINS and Co., 3, Heybourne Villas, Tottenham. Advice given upon English and Welsh Mines.

MESSRS. SCOTT AND CO., 5, COTHALL BUILDINGS, THROGMORTON STREET, E.C. WEST DEVON CONSOLS.—These shares have further advanced, and will go higher. Present price, £23½ to £23¾, and a large business doing in them.

STOCKS AND SHARES, FOREIGN BONDS, RAILWAYS, &c., BOUGHT AND SOLD. Reliable information given on Mining Properties and other Securities. Established Twenty Years. PETERICK AND CO., 51, THREADNEEDLE STREET, CITY. N.B.—We recommend for a certain rise ALSTON UNITED Mining Shares.

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ARE BUYERS OF
LEAD ASHES SULPHATE OF LEAD, LEAD SLAGS,
ANTIMONIAL LEAD, COPPER MATTE, TIN ASHES, &c
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COPPER, LEAD, AND ANTIMONY.

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CHROME ORE, MAGNESITE, EMERY STONE, PUMICE STONE,
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ANALYSTS AND ASSAYERS,
Assays or Complete Analyses made of Copper, Silver, Lead, Zinc, Tin, and
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AUSTRALIAN TIN—PRIZE MEDAL, 1877.

THE UNDERSIGNED IS PREPARED TO EXECUTE
ORDERS for the
"KANGAROO" and other GOOD BRANDS.
S. L. BENSUSAN
Kangaroo Tin Works, Sydney, 21st May, 1879.

MR. W. H. H. WATSON, STOCK AND SHARE DEALER,
has FOR SALE, net:—
10 Mellanear, 50 Parys Corpora., 27s 6d 20 West Caradon, £3.
10 Polrose, 20 Prince of Wales, 15s 6 20 Wheel Crebor, £4
WANTED.—An offer for 10 Herodsfoot and 10 Gunnislake (Clitters).
Address—1, ST. MICHAEL'S ALLEY, CORNHILL, LONDON.

MR. W. TREGELLAS, 19, BISHOPSGATE STREET
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Deals in all descriptions of STOCKS and SHARES at close market prices, and
is always in a position to do business in SANTA BARBARA, PITAGUI,
and BRAZILIAN GOLD MINES.

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ALL BUSINESS TRANSACTIONS FREE OF ANY CHARGE FOR
COMMISSION.

Notice to Investors and Speculators.
Mr. BUDGE has DEALINGS in:—
50 Bedford United, 35 East Caradon, 53 New Wye Valley.
50 Blaen Caelan, 25 Frongoch, 30 North Herodsfoot.
15 Blue Hills, 100 Flagstaff, 100 New Kitty.
100 Bettw-y-Coed, 50 Glenroy, 30 Penhalls.
100 Consolidated, 60 Gawton, 50 Con-yr Orsedd.
50 Cambrian, 20 Grogwinion, 30 Penhalls.
50 Cwm Pryf, 50 Glenrock, 75 Prince of Wales.
50 Carnarvon, 40 Hington Down, 10 Roman Gravel.
30 Derwent, 20 Gunnislake (Clitters), 100 South D'eresby.
100 Don Pedro, 30 Great Holway, 30 South Indian.
15 Devon Consols, 50 Marke Valley, 30 South-East Wynad.
40 East Van, 50 Mynydd Gerdud, 50 West Kitty.
50 East Chiverton, 100 Nava de Jadraque, 65 West Caradon.
SPECIAL BUSINESS in Welsh Shares as Buyer or Seller.
Mr. Budge invites the attention of investors to the Wheal Coates United Tin
Mine, St. Agnes, and he strongly recommends the purchase of these shares,
10s. paid, at 25s. each. This mine is no speculation, as the reserves of tin enable
Mr. BUDGE to state that in a short time the mine will be making profits.

HORACE J. TAYLOR, STOCK AND SHARE DEALER,
38, GREAT ST. HELEN'S, LONDON, E.C.
(Late of the PORT PHILLIP AND VICTORIA MINING COMPANIES.)
Mr. TAYLOR has DEALINGS in the undermentioned:—

50 Almada & Tiroto,	10 Devon Great Consols,	100 Port Phillip.
100 Bedford United,	100 Eberhardt & Aurora,	150 Rossa Grande.
100 Consolidated,	50 East Caradon,	50 South Daren.
100 Colorado,	75 Frontino,	25 Tankerville.
100 Don Pedro,	50 Hington Down,	100 Victoria (London).
20 Derwent,	10 Prince of Wales,	50 Wheel Kitty.
	100 Pestarena,	

BWLCH UNITED MINES.—SPECIAL BUSINESS in these shares.
VICTORIA (London).—These shares should be bought for investment at 10s.,
as another dividend must shortly be declared.

WHEAL COATES UNITED.—Buyers of these shares should secure them at
once, for any advance in tin would undoubtedly put the shares better. Price 25s.
BANKERS: CENTRAL BANK OF LONDON (Limited).

MR. W. MARLBOROUGH, STOCK AND SHARE DEALER,
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Can SELL the following SHARES at prices annexed:—

50 Almada, 13s.	20 Hington, £1 2s. 6d.	20 Ruby Silver, £9 8s. 9d.
100 Chontales, 3s. 3d.	10 Herodsfoot, £3 13s. 9d	40 So. D'eresby, 30s.
20 Colorado, £2 10s.	10 Hornos, £7½.	20 So. Daren, £3½.
30 Consolidated, 18s. 9d.	15 Leadhills, £2 17s. 6d.	5 South Frances, £18.
70 Cedar Creek, 2s. 6d.	20 Marke Valley, £2.	30 So. Indian Gold, £2½.
20 Derwent, £2½.	3 Miners, £11½.	50 Tamar St.-Lead, £1½.
10 Devon Consols, £13½.	20 New Quebrado, £4.	10 Tankerville, £4 18s. 9
50 Don Pedro, 17s. 6d.	30 Nou. Monde, £2 1s. 3	2 Van, £19½.
20 East Caradon, £2 17 6	50 Parys Corpora., £1 6s. 3	40 Van & Glyn United,
25 East Crebor, 22s.	100 Pestarena, 6s.	16s.
15 East Van, £3 12s. 6d.	50 Port Phillip, 11s. 3d.	25 West Jewell, 19s. 6d.
20 Eberhardt, £4 5s.	20 Punclicillo, £4 1s. 3d.	100 West Kitty, £1 16s 6d
40 Flagstaff, £1 11s. 3d.	50 Prince of Wales, 16s.	10 Wheel Crebor, £4.
25 Glenroy, £1 1s. 3d.	50 So. Toirne, 19s. 3d.	50 Wm. Grenville, £9½.
30 Glenrock Gold, £1½.	100 Rossa Grande, 5s. 3½.	25 Yn-y-Fron, £1 11s. 3d.

BWLCH UNITED MINES.—SPECIAL BUSINESS in these shares.
SOUTH WHEAL CREBOR (Limited), £1 fully pd., strongly recommended at 21½

MR. JOHN RISLEY, STOCK AND SHARE BROKER,
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ESTABLISHED 1858.
BANKERS: LONDON AND WESTMINSTER, Lothbury.

POLROSE TIN MINE AND WEST CARADON MINE (Copper) specially recom-
mended to investors.

The Polrose Mine is in a very rich district, and surrounded by mines which
paid nearly £2,000,000 sterling in dividends. It is 370 fathoms long. The course
of the lode, of which there are 12. Polrose, down to the 50 fm. level, returned
230 tons of tin, realising £11,584.

From the 50 the shaft has been sunk perpendicularly, with the view to pro-
secute both lodes in depth. This shaft is now down below the 80, at which depth
a short cross-cut was put out, and out the Margaret lode, presenting the most
encouraging features.

At the 90, and perhaps sooner, the lode will be in the shaft. When tin dropped
to £40 per ton raising it was suspended, and operations confined to sinking the
shaft.

The machinery on the mine consists of a steam pumping-engine, with two
boilers, capable, we are informed, of taking the mine to the 150. A 24-inch
stamping-engine, two boilers, and 60 heads of stamps, horizontal winding-
engine complete, dressing-floors, calciner, tin-house, powder-house, dry and
store-house, &c., which, with the work done, has cost nearly £30,000. The com-
pany has a cash balance in hand of nearly £3000 over every liability. The grand
point of the mine, irrespective of the Margaret lode and the working of
the tin ground, is the intersection of the Polrose lode in depth, and it appears to
us there are few tin speculations like it. It is the opinion of all those who have
seen the mine, surrounded as it is by some of the richest tin mines in Cornwall,
that great deposits of tin will be found in depth, and a good lode in the shaft
might send shares to double their present price.

West Caradon was started and owned chiefly by Quakers in 1837, and upon a
small outlay had paid up to 1861 £104,276 in dividends. The present company
have within the last month made three very important discoveries. This cele-
brated old mine within a very short period will, in all probability, command its
former market value—£120,000.

SHARES WILL BE ALLOTTED STRICTLY IN THE ORDER
IN WHICH THE APPLICATIONS ARE RECEIVED.

THE GOLD COMPANY OF SOUTHERN INDIA (LIMITED).

CAPITAL £100,000.

Subscriptions will be received for the SECOND ISSUE of
60,000 Shares of £1 each, part of the registered
capital, at a premium of 5s. per share.
The premium on this issue of shares will be specially carried to the
Reserve Fund for the benefit of Shareholders.

CHAIRMAN OF THE BOARD OF DIRECTORS.
Captain FORTESCUE, J.P.

BANKERS.

The CAPITAL AND COUNTIES BANK (Limited), Head Office,
Threadneedle-street, London, and at the various Branches.

SECRETARY—MR. JOSEPH WYKES.

Since the first allotment of shares the directors have the pleasure
to announce that the company have secured the very valuable free-
hold estates of "Lackadie" and "Madutelia," in the Wynad district
of Southern India, the very heart of the gold-bearing region, com-
prising an area of about 900 acres, for a sum of £40,000, payable
£20,000 in cash and £20,000 in shares at the option of the company.

As an instance of the daily increasing demand for gold properties
in Southern India, the directors need only inform the shareholders
that since securing these estates a much larger price has been offered
for them, which, taken with the restrictions placed upon the grant of
the leases by the Government, and the limitation to 30 acres, renders
the acquisition of these properties most advantageous.

Too much importance cannot be attached to the circumstance that
the property the company has acquired is freehold, and without re-
strictions.

About 250 acres is under cultivation as a Coffee Plantation, and in
the sale to the company is included the growing crops, buildings,
stock, &c. The estates possess a plentiful supply of labour, water,
and timber, and are easily accessible to the Imperial and district
roads, and water carriage.

At the earliest opportunity the directors purpose erecting sufficient
machinery to crush 150 tons of quartz per day, which it is estimated
will give the following result:—

150 tons of quartz crushed per day for 300 working days, yielding
10 dwts. of gold per ton at the selling price of
£3 15s. per oz., amounts to, per annum £84,375 0 0
Deduct cost of crushing 45,000 tons, at 12s. 6d. p. ton 28,125 0 0
Other expenses—say, 5s. per ton 11,250 0 0

Thus leaving a net profit per annum of £39,375 0 0
(Equal to a dividend of over 40 per cent. on the entire capital of the
company.)

Corroborative evidence of the value of these estates may be had in
the prospectus containing extracts from the recent report of Mr.
Brough Smyth.

The directors, in conclusion, have much pleasure and satisfaction
in submitting the investment to the public, and that in order to avoid
disappointment to applicants for shares, they will allot the shares
strictly in accordance with the order in which they are received.

Applications will be received by the Bankers or Secretary of the
company as follows:—

5s. 0d. per share on application.
7s. 6d. " on allotment.
12s. 6d. " 15th June.

Prospectuses, Forms of Application, Government Notices, and Map,
will be forwarded on application to the Secretary, at the offices, 15,
Finsbury-place South, London, E.C.

CWM BRWYNNO LEAD MINING COMPANY (LIMITED).

37, WALBROOK (Nos. 107 and 108).
SECRETARY—P. HARRIS HARE.

TWO HUNDRED DEBENTURE BONDS of £10 each at par,
interest of 10 per cent. per annum, payable half-yearly
on the 1st May and 31st October.

THESE BONDS ARE NOW OFFERED TO THE PUBLIC, being
the balance of the issue of £5000 not taken up by the Shareholders.
They are secured by the lease, plant, machinery, and mineral, with
the mine and all effects, on which over £25,000 has been spent.

The mine is in full work, and it is estimated to produce 50 tons of
lead per month as soon as the necessary alterations and additions to
the machinery are completed. The motive power being entirely
water lead can be brought to bank and dressed at much less cost
than if steam were employed. The mine is fully developed down to
107½ fathoms, and in some of the levels lead ore is being broken
yielding 4 to 6 tons to the fathom.

Applications for these Bonds may be made to the National Pro-
vincial Bank of England and its Branches, or to the Secretary at
the Office, 37, Walbrook.

THE FLORENCE SILVER-LEAD AND BLENDE COMPANY

(LIMITED).

OFFICES—37, WALBROOK, E.C.

The Directors of this Company have now completed their test
operations (which have lasted over several months), and satisfied
themselves of the existence of silver-lead, blende, and copper in
very large quantities, easily accessible from several points in the
property. They have also made arrangements with the vendor for
a considerable abatement in the cash portion of the purchase money,
thereby relieving the Company of a considerable liability in cash,
and have further arranged that this money shall be paid to him in
instalments of ONE-FOURTH ONLY OF THE SUBSCRIPTIONS AS
THEY ARE RECEIVED. They, therefore, feel they may now offer the
shares to the public with every confidence in the undertaking proving
a commercial success, realising considerable profits on a judicious
outlay in machinery and labour. The assays of stones taken from
the latest workings give the following results, which must prove
conclusive:—

COPPER ORE.

10½ per cent. of fine Copper.

BLENDE ORE.

57½ per cent. of pure Zinc, and 8½ ozs. of Silver.

SILVER-LEAD ORE.

80 per cent. of Lead, and 43 ozs. of Silver.

The sett is situated in the Parish of St. Ive and in the midst of the
celebrated lead mining district of Liskeard, Cornwall.

The lease is for 21 years, at a rental of £20 per annum for the
first year, increasing £10 per annum until £50 is reached, when
there is no further increase, and this rent merges into a royalty
of 1-18th.

The sett is 1½ mile long by about 1 mile wide, and is traversed by
several well-known lodes.

There are two shafts already sunk about 50 fathoms, and an adit
level driven in on the course of the lodes, from which ore can be
raised at once.

There is ample water at all seasons for dressing purposes, for
which there is no extra rent.

There are good roads into Liskeard, which is only some three miles
distant, affording easy facilities for transit to and from the mine.

The Capital of the Company is £30,000, in 6,000 shares of £5
each, payable 20s. on application, 20s. on allotment, and 20s. every
three months until fully paid, with liberty to pay up in full at a
discount of 5 per cent. per annum.

Applications for Shares to be made to the Secretary at the Offices,
or to the Devon and Cornwall Bank, Liskeard, Cornwall.

Notices to Correspondents.

* * Much inconvenience having arisen in consequence of several of the Numbers
during the past year being out of print, we recommend that the Journal should
be filed on receipt; it then forms an accumulating useful work of reference.

ANTIMONY.—Could any reader oblige by procuring for me the following infor-
mation: The quantity of antimony ore and the quantity of antimony metal
imported. The quantity of metal exported, and to what countries principally.
—WM. MAGEE: London, May 11.

Received.—"C. H. D." (New York)—"E. B." (Philadelphia)—"J. F. P." (Hayle)
"W. M."—"M. M." (Southsea)—"J. B." (Barnstaple)—"Shareholder" (Mush-
room Mines)—"J. T. D."—"Agent," on Hydraulic Engines: Next week—
"E. L." (Barrow)—"L. M."—"Shareholder" (Cornwall Great Con-
sole) had better write to the Secretary—"Old Reader" (Boulogne)
on Mining Then and Now, shall be published next week—"J. B. J." (Leeds)—
"J. M."—"C. F. S."—"G. K. N." (Wolverhampton).

THE MINING JOURNAL,

Railway and Commercial Gazette.

LONDON, MAY 15, 1880.

NEW MOTIVE POWER ENGINES FOR MINES, &c.

Considerable progress of late has been made in the construction of
engines the motive power of which is gas, and Mr. F. HURD has recently
introduced one which gives every promise of being extensively adopted
for many purposes for which gas power has not hitherto been thought
of. The Hurd patent compound condensing and non-condensing self-
starting and reversing silent gas-engine is an invention for which the
patentee claims some most important and special advantages over those
now in use. The patent engines can be advantageously placed in mines
and worked by explosive gases collected in mines or otherwise. With
regard to explosive gases they are diluted in proportion to the neces-
sary power required at each stroke of the piston when in full motion.
The air passes by special receiver through injectors by an inter-
mittent action and a pressure or centrifugal governor, thus making it
impossible for a dangerous quantity of gas to be admitted. When
the engines are employed in coal mines, for which they are particu-
larly well adapted, the igniting agent is enclosed in an apparatus
specially constructed according to the Davy lamp principle, so as to
prevent external explosions from the ordinary fire-damp or other
gases. The engines can be made to 50-horse power and upwards,
condensing or non-condensing, single or double-acting, worked by
gases capable of being exploded, expanded, or condensed, with or
without the addition of gun-cotton, there being improved apparatus
for reversing, starting, and transmitting the power to the machinery
to be driven. The engines have also a special link-motion with two
fixed eccentrics only, and are capable of being reversed by a hand
lever or by self-acting apparatus, and are connected and disconnected
from the machinery to be driven by means of friction-locking gear,
whereby an engine up to 50-horse power can be started by one per-
son with the greatest ease, thus overcoming one of the difficulties
hitherto unavoidable in the starting of gas or gun-cotton engines.
By means of patent locking friction gear separate shafting can be
driven at both sides of the engine. When ordinary coal gas is used
the consumption varies from a farthing to a halfpenny per indicated
horse power per hour, and is regulated by HURD's patent injector
pressure governor. One person is capable of managing an engine,
which can be worked at from 20 to 300 revolutions per minute, the
power being given off at each stroke. The use of water, which is
converted into a lubricant, and into steam for motive power for low-
pressure cylinders at 80 lbs. per square inch, keeps the cylinders and
piston valves clean and well lubricated, rendering it unnecessary to
frequently take the engine to pieces to remove carbon and deposits
of burnt oil and gas, thus rendering stoppages unnecessary. All
parts of the engine are made to templates, interchangeable, and no
foundations are required for those of small power. There is also
marked solidity about the engines, each double-throw main crank
being forged from best scrap iron, and finished complete, with eccen-
trics for valve gear, from one solid forging. For localities some dis-
tance from a coal field the machine can be worked by gasoline pro-
duced by small gas making machines.

By Mr. HURD's invention great economy is claimed in the con-
sumption of gas for a given amount of horse-power, to the extent,
indeed, of one-third less than is required by other gas-engines, so
that gas, air, and water are utilised and converted into good motive-
power at a very small cost. The spent power, it may also be said,
from the high-pressure cylinder works the second cylinder, and
finally a vacuum is produced which also actuates the second cylinder.
The adoption of gas-engines, especially where only a small amount
of power is required, is now rapidly extending, seeing that there is
no delay or expense caused in lighting fires and the other necessities
required in raising steam for ordinary engines, and there is no reason
why those of large calibre should not be found equally economical
and advantageous to proprietors of machinery. Gas, too, gives a
much higher heat than is obtained by the combustion of coal. The
best compound condensing engine uses about 2 lbs. of coal, an ordi-
nary condensing engine 5 lbs., and ordinary small high-pressure en-
gines from 4 to 10 or 12 lbs. per hour, whilst a considerable quantity
of coal is required in getting up steam in the mornings as well as at
intervals during the day. The economical results as regards engines
using coal convert into work a comparatively small quantity of the
total heat of combustion. A high-pressure engine using 2 lbs. of coal
converts about 8 per cent. of the total heat of combustion; an engine
using 4 lbs. of coal, about 4.0 per cent.; one using 6 lbs., 2.6 per cent.;
one using 8 lbs. of fuel, 2.0 per cent.; and where the engine uses
10 lbs. of fuel only about 1.6 per cent. of the total combustion of
heat. With gas the amount of heat obtained from a given quantity
is much greater, according to our highest authorities. In Mr. HURD's
engines those not condensing the consumption of gas is 15 cubic feet
per hour, and in the condensing ones the gas consumed is 10 cubic
feet, with 12 gallons of water. Of course, there is considerable
variation in the quality of gas; and, as might be expected, it has
been found that the higher the illuminating power the greater the
heating power; but the heating power does not increase in the same
ratio as does the illuminating. Taking ordinary gas coal, Mr.
HURD's non-condensing engine should develop by the combustion
of gas (15×700)=10,500, and the condensing (10×700)=7,000.
Were all the heat of combustion of one cubic foot of gas converted
into work 1-horse power would only require 3.66 cubic feet per hour.
The percentage of heat of combustion converted into work in the
gas-engine that was non-condensing would be 24.4 per cent., and in
the condensing engine 36.6 per cent., there being thus a marked dif-
ference between the percentage of the heat of combustion obtained
from coal and that from ordinary gas.

Taking the percentage given above that the condensing engine of
Mr. HURD turns into useful effect from 4 to 23 times as much heat
as the steam-engines we have alluded to as consuming certain quan-
tities of coal per high pressure, the results show the value of the
gas-engines patented by Mr. HURD, and the marked economy that is
effected by the use of gas as compared with coal, and if, as has
been suggested, that in all probability a special quality of gas will
ultimately be produced for a motive power at a lower cost than that
paid at present, then will the value of such engines be still further
enhanced. Gas-engines are of quite recent date, and already they
have been largely produced, and the demand for them is rapidly in-
creasing, whilst it has been found that they can be adopted for many
purposes for which steam would not be applicable. There is no doubt

they will find their way into our mines, and be able to perform a
great deal of the hardest work that is now being done by hand, and
so economising manual labour and saving expense. Mr. HURD, it
may be said, has prepared the necessary material for fixing a gas-
engine to tram cars. Apparatus is fixed so as to accumulate air power
at each stoppage and when going down hill. The air power is used
to start the car independent of the gas or in combination with it.
A car with 50 passengers and luggage will make journeys of 24 hours
duration or more with one charge of gas, and is controllable by one
person at speeds up to 10 miles an hour, and will rise any ordinary
traffic incline, freely turning any ordinary curve, and at night the
car could be brilliantly lighted up with the gas it contained. The
expense of working, it has been estimated, would not exceed 3d. per
mile with a full load. As in adopting gas as a motive power there is
entire immunity from danger by explosion, and with the little at-
tendance it requires, and its cheapness as compared with coal, there
is every reason to believe that it will be most extensively used by
users of power either on a large or small scale.

OUR RAILWAY IRON ABROAD.

The data now available with respect to the external consumption of
our railway iron during the first four months of this year present
very considerable interest. It appears that the exports of this de-
scription of iron in April were 68,809 tons, as compared with 33,025
tons in April, 1879, and 46,387 tons in April, 1878. The United States
figured in the list for April this year for 21,067 tons, while the cor-
responding shipments in the same direction in April, 1879, were just
nothing at all. In the four months ending April 30 this year we
sent the United States 61,434 tons of railway iron, while the cor-
responding shipments in the same direction in the corresponding period
of 1879 did not exceed 1184 tons; and in the corresponding period
of 1878, 134 tons. The United States have once more taken the first
place among our external clients for rails and accessories, British
India ranking second this year with 53,382 tons; while at a very re-
spectful distance Australia comes third with 21,531 tons. The ship-
ments of railway iron from Great Britain to British colonies in the
first four months of this year will be seen to compare satisfactorily
with the corresponding shipments in the corresponding periods of
1879 and 1878:—

Colonial Group.	1878.	1879.	1880.
British America	5,522	2,920	12,527
British Africa	5,112	1,909	3,115
British India	44,236	38,086	53,382
Australasia	29,594	27,698	21,531
Total	84,464	70,613	90,555

The progress in the Colonial and American demand for our railway
iron this year at once accounts for the increase observable in the ship-
ments generally to April 30 this year—79,444 tons—the demand from
minor foreign countries having remained virtually stationary in 1880.

Taken as a whole, the statistics available with respect to the ship-
ments of railway iron from our shores in the first four months of this
year are not by any means discouraging; but the serious question
arises whether equally progressive results will be disclosed for the
whole of 1880. The aspect of the American iron trade is far less
lively now than it was in January or February, almost every mail
having brought tidings of lower prices and an irregular and dimi-
nished demand at Philadelphia and New York, and other important
commercial centres. As three-fourths of the increase which has
taken place this year in our railway iron shipments is due to the
augmented demand on American account, a check in the American
consumption of our rails would soon exert a sharp influence upon
the official statistics. Moreover, it must be borne in mind that the
shipments of British railway iron to the American Republic began to
revive in the autumn of 1879, so that in the closing months of this
year a comparison of our Transatlantic rail exports may present a
falling off after all. The return to lower prices which has been
gradually taking place during the last three months is calculated,
however, to give stability to the demand; even if ground is lost in
the United States it may be regained in other directions. Anyhow,
a good start has undoubtedly been made this year with our railway
iron shipments. The exports for the first four months of this year
amounted altogether to 198,220 tons, or at the rate of nearly 50,000
tons per month, or 600,000 tons per annum. In the corresponding
period of 1879 the corresponding exports scarcely averaged 40,000
tons per month, or something under 480,000 tons per annum.

An increase of 25 per cent. in the exports has, accordingly, been
established thus far this year, and we can but regard this as a
most cheering fact.

THE MINING INDUSTRIES OF WARWICKSHIRE.

As a manufacturing county Warwickshire stands second to none in
the kingdom, for it is a veritable hive of industry, having Birmingham
for its centre, and which has been aptly termed "The Toy Shop of
the World," its toys, however, being mostly of the heavy and utili-
tarian character, and such as are in use daily in every part of the
world. But it also contains valuable beds of minerals that have not
been so extensively worked in proportion to their extent, as those in
most other parts of the country. The chief minerals are coal, iron-
stone, limestone, freestone, blue flagstone, much of which is used for
paving and flooring, and a peculiar kind of blue clay, having some of
the properties of soap. There are also valuable springs of chalybeate
mineral waters, which are well known both at home and abroad.
The Warwickshire coal-field, however, enjoys the enviable position
of being the nearest to the Metropolis of any, yet, singular to say,
such a great advantage has not been of any benefit to its colliery
owners, and a mere trifle of what is raised at the mines finds its way
to London. The proprietors of coal mines in the most distant parts
of the kingdom have always looked upon the London market as about
the best, and have done all they could to cultivate the trade there.
But such has evidently not been the case with the proprietors of the
coal mines in Warwickshire, who apparently have looked more to local
requirements and the markets nearest to them. The coal measures
extend as far as the ancient city of Coventry, and on the other side
as far as Tamworth, in some places being intersected by faults that
bring up the new red sandstone. Between Coventry and Warwick
there is an area of about 90 square miles at a depth of from 2000 ft.
to 2500 ft. The prolongation of the coal seams under the trias has
been proved as far west as Wyken Colliery, in the Coventry district,
but it has not been ascertained how much further they extend in the
same line, but according to Prof. RAMSAY the probabilities are that
at some distance in the same direction the seams will be found to
terminate against the same bank of Silurian rocks which forms the
southern limit of the measures of South Staffordshire.

In the upper coal measures there are five workable seams, being
separated at the northern end by about 120 ft. of shale and sand-
stone, which all decrease in going southwards, and at Wyken they
combine to form a bed 20 ft. thick, being a change parallel to that
in South Staffordshire as regarded the Thick coal. Under the Per-
manian rocks there is said to be an equal quantity of coal at the depth
of less than 2500 ft., and about four times as much under 4000 ft.,
and the probability is that the seams are regular and nearly hori-
zontal, so that one of our leading geologists states that he cannot but
regard as of peculiar value this vast reservoir of fuel lying at the
borders of the South-Eastern counties, and actually closer than any
other coal-bearing district to the Metropolis. There is, therefore, a
great future before the Warwickshire district, owing to the compari-
tively small quantity of coal raised in past years, more especially as
regards the metropolitan market, which seems to have been almost
ignored by the mine owners. Yet one would have thought that,
being less than 100 miles from London, and with the good railway
accommodation there is, the low carriage rate, and with miners
wages so much lower than those paid in the Midland and more
northern districts, that the colliery owners of Warwickshire would
have been able to send as much coal as they could raise to London
alone. But such has not been the case, so that the Metropolitan
market, so far as inland coal is concerned, is principally supplied
from Derbyshire and Yorkshire, where the carriage rate and wages
are very much higher. According to the returns for the last month

we find that all the coal sent from Warwickshire to London was only about 1500 tons, of which the Exhall Colliery was credited with 480 tons, the Griff 400 tons, and Hawwood 460 tons. Still the field is one of the oldest we have in the inland district, for coal was worked at Bedworth as early as 1600, and is alluded to by CAMDEN in his "Britannia," who states the mode in which the coal was worked, and to the fact that the miners assured him that large toads had been found in the solid coal, a belief at one time being pretty general amongst miners that live toads had been found in coal, where they must have been embedded for many thousands of years. In addition to the measures now being worked there are large districts over-spread by formations belonging to the Permian and Triassic systems, where in all probability coal will be found at depths from 3000 ft. to 4000 ft. In 1866 the quantity of coal raised in Warwickshire was 775,000 tons, in 1869 it had fallen off to 585,630 tons, and in 1870 the quantity was 647,540 tons. After this latter year the production began to increase considerably, so that in 1874 the output was 851,500 tons, in 1876 it had advanced to 884,750 tons, in 1877 to 930,850 tons, and in 1878 to 1,025,450 tons from 34 collieries. The area of coal field between the boundary of the Permian formation and the outcrop of the 7-ft. coal is 30 square miles, and the net available tonnage for future use, according to the report of the late Mr. WOODHOUSE to the Royal Commission, would be about 453,000,000 tons at depths not exceeding 4000 ft. But in the summary of the probable amount of coal under Permian and other underlying formations at depths of less than 4000 ft., with the usual deductions, it is calculated that in Warwickshire, under the Permian, there are 79 square miles of coal, equal to 2,165,000,000 tons, under the New Red 5 square miles, with 150,000,000 tons, and north of Atherstone, under the same formation, 6 square miles, with 179,000,000 tons of coal. There are no blast furnaces in the county of Warwick, although the consumption of raw iron in it must be very large; yet a heavy tonnage of the argillaceous carbonate and black-band ironstone of the coal measures is raised in it, the last return giving the production for the year at 57,222 tons, and no doubt more could be raised, were there works nearer at hand to smelt it, for with an abundance of coal, limestone, and ore of fair quality, iron smelting should be made as profitable at least as in any other part of the kingdom. A good deal of fire clay is also raised at some of the pits, the yield for 1878 having been upwards of 13,000 tons. Taken altogether the Warwickshire coal field appears to be in an exceptionally good position, and with its vast fields of minerals must become one of the most important feeders of the Metropolis, which from its proximity to it, it certainly ought to be at the present time.

THE CHEADLE DISTRICT.

In the course of a few days the first sod of the long-wished-for railway is expected to be turned, and then the birth of commercial prosperity may be said to have commenced, and the wealth which is known by practical and scientific men to exist in this unique and perfect coal basin will then unfold its treasures to the coffers of the world. In wandering through a valley at the outskirts of this coal field the red hydrate iron ore of the Froghall district was clearly traced to its outcrop, and even the refuse heaps of cinders (relics of the ancient iron-producing industries) were discovered, showing unmistakably that the high quality of the hydrate stone was appreciated in ages most remote, when the only means available for reducing the ore to merchantable iron was on the open hearth, and it was only pure and easily reducible stone that would yield to this rude method—hence the reason our forefathers were compelled to select the ore they could work. But it is this very feature which even now in our enlightened days makes this class of stone so valuable and highly prized by ironmasters. A mixture of this with some intractable ore renders the latter easily reducible, and by bringing down the charge in the furnace in less time not only adds considerably to the yield, but also from its great purity increases the value of the iron, and so acts in two ways to increase the profits of the manufacturer.

Crossing over to the other side of the basin, a distance of from 5 to 6 miles in a straight line, it was found that each seam of coal in its turn shows itself to daylight, as regularly laid one on the other as the folds of a book, until the bottom measures of the carboniferous series, and resting immediately on the millstone grit, the red hydrate ironstone was seen as persistent as any of the other measures. Now, what is there to prevent this valuable iron band from lying under the whole of the Chedale Field? Nothing whatever; and assuredly it is there as certain as the coal, and at no distant date will be sunk to by an enterprising firm, and, as has been the case in the Churnet valley, colossal fortunes will be made.

KILLALOE SLATES.—An effort is being made to press upon the attention of the Royal Dublin Society the importance of affording the above slates a fair chance of being employed in the agricultural buildings about to be erected at Ball's Bridge, Dublin. It is only reasonable to expect that in an exclusively Irish undertaking of this description reasonable preference should be given to the use of Irish materials in its construction; and, as there is reliable authority that the slates of this company are equal in all essential respects to those of any Welsh or other quarry, it would not be an excessive extension of patronage if they were allowed at least an equitable chance of being used. This can readily be done if the committee instruct the architect to include them in his specification. This is all that the Killaloe Company desire. If complied with no grounds for subsequent complaint of partiality or of exclusive preference would exist. The transaction would be divested of the complexion of undue favour, and it would not be open to anyone to say that the society had either acted ungenerously or with disregard to native claims to patronage.

GOLD MINING IN AUSTRALIA.—We have been favoured by Major Couchman, Secretary for Mines, with the reports of the Mining Surveyors and Registrars for the quarter ended December, 1879, which show that the total get of gold during the quarter was from alluvium, 79,733½ ozs., and from quartz reefs, 129,678½ ozs. = 209,411½ ozs. Of quartz 233,463½ tons were crushed, and yielded 109,257½ ozs., or at the rate of 9 dwts. 8-63 grs. to the ton. Of quartz tailings and mullock 7182 tons were treated, yielding 692½ ozs. of gold, or at the rate of 1 dwt. 22-28 grs. to the ton. Of pyrites and blanketing 11163 tons were operated on, yielding 2949½ ozs., or at the rate of 2 ozs. 12 dwts. 19-71 grs. to the ton. There were 13,824 Europeans and 8945 Chinese employed in alluvial, and 14,619 Europeans and 165 Chinese in quartz mining; together 37,553. The approximate value of the mining plant in use was £1,899,788½. The number of distinct quartz reefs actually proved to be auriferous was 3582, and the number of square miles of auriferous ground actually worked upon was 1234. An appendix states that attention has been directed by Mr. W. Rasche, of Melbourne, to his patent direct-acting steam battery for quartz crushing, &c., for which he claims several advantages, amongst which are:—that it is very portable, as the battery can be taken to pieces and removed on pack-horses, the entire weight being about 26 cwts., and the heaviest piece about 6 cwts.; that the machine is said to be thoroughly trustworthy; its crushing capacity is represented to be 30 tons per week, through the 110 hole grating; and that the cost of the machine is 1500l., and of a complete plant with battery, boiler, and all appliances, 3000l.

LARGE SALE OF SHARES.—The unprecedented premium of 800 per cent. per share has just been realised at the Auction Mart on the sale of a number of shares in the Sun Insurance Company. The property comprised 50 shares in the fire insurance department, and an equal number in the life department, forming a part of the personal estate of the late Mr. Pole. The fire insurance shares were the first offered in 20 lots of three and two shares each, the particulars stating that the dividend payable upon each share was 10l. per annum, in addition to a special dividend, the two dividends together averaging nearly 22l. per share per annum. The amount of each share in the books of the company did not transpire; but the auctioneer, Mr. Kiloart, in introducing the property stated that the reserved price per share was 437l. Before inviting biddings he said that the company, which dated from the year 1710, was about the oldest in the kingdom, and as a proof of the enormous extent of its transactions

it contributed one-eighth of the entire sum paid by the London insurance companies to the Metropolitan Fire Brigade Fund. On the shares being offered they were all rapidly bought up at prices ranging from 456l. to 460l. per share, the aggregate sum realised for the 50 shares being 22,851l. The life assurance shares were next offered in 10 lots of 5 shares each. It was stated that the amount of the shares was 100l. each, of which 10l. has been paid, upon which the dividend was at the rate of 2l. 14s. per annum, in addition to an extra dividend by way of bonus every five years, now amounting to 12l. per share, making the annual dividend on the 10l. per share paid 4l. 14s. 6d., or nearly 50 per cent. The auctioneer stated that the life department commenced in 1810, and that ever since that time a very large amount of business had been done, the present investments alone being more than a security for maintaining the dividend. The whole of the shares found eager purchasers at from 87l. to 90l. per share, representing a premium of 800 per cent., which it was stated in the room was without a parallel at any similar sale.

CHINA-CLAY—ITS NATURE, PRODUCTION, AND USES

Comparatively little is known to the general public concerning the production and application of china-clay, although it occupies an important position as a raw material in one of the largest manufacturing industries of the country. This want of knowledge is no doubt attributable to some extent to the absence of a handy little book giving a complete outline of the whole matter, but such a work is now placed within the reach by the issue (through Messrs. John Steen and Co., of Wolverhampton) of "A Treatise, Technical and Practical, on the Nature, Production, and Uses of China-Clay," with several useful tables and statistics and other information bearing on the subject, by DAVID COCK, M.E., of St. Austell. By way of introduction there is an excellent chapter on geology, giving as complete an exposition of the science as could reasonably be expected in 25 pages, and there is then a chapter on raising the clay and making it marketable. Study is facilitated by separating the several portions of the subject and treating of prospecting, trial pits, testing clay, opening a new works, the shaft drift and rise, water supply, clay stopes, pumping clay, drawing the sand, mica, settling pits, tanks, and the dry respectively. Mr. Cock, who is favourably known to a large number of readers of the *Mining Journal* as an engineer of considerable experience, states that his object has been to place before his readers matters of public utility with such a useful ensemble of general facts and statistics as will give them intelligent information on the subject, and in this he has certainly succeeded.

The chapter on the uses of china-clay in the arts is a particularly interesting one, and it will no doubt surprise a large number of readers to learn to how many purposes it is applied. Take for example the use of china-clay in the manufacture of paper. Mr. Cock points out that it has the property of rendering paper smooth and opaque, as well as serving other purposes no less important to the manufacturer. It is readily incorporated with the fibre, and if very finely divided will adhere very closely to it. Some years ago much was heard about adulterated paper, but he remarks that it was soon shown that with the use of china-clay excellent paper could be sold at prices at which even passable pure paper could not be made. Almost any pulp can, by this means, be converted into excellent writing paper, and before this fact became generally known very large fortunes were quickly made by those in the secret. In the same chapter reference is made to its use in connection with pottery, sizing cotton, manufacture of alum, ultramarine making, copying ink, pencils, crayons, water colours, india-rubber, and soap, whilst in the concluding chapter there are various tables calculated to prove invaluable to the trade—such as lists of china-clay, shipping ports, lists of freights, tables of foreign moneys, and various other matters. The volume certainly well fulfils the author's intention—that of supplying a complete and reliable treatise on the subject—and will without doubt be extensively read and appreciated.

THE SHORT HEATH COLLIERY EXPLOSION.

The enquiry directed by the late Home Secretary, with reference to the conduct of Michael Harle, the certificated manager of the Short Heath Colliery, near Willenhall, where, on Nov. 12, an explosion took place by which six men were killed, was terminated on Saturday, at the Great Western Hotel, Birmingham, when Mr. J. Motteram, Q.C., judge of the Birmingham County Court, the commissioner, gave judgment. There were present on Saturday Mr. Rupert Kettle, jun., who appeared for Mr. Walker, of Wolverhampton, to whom instructions had been given by the late Secretary of State to undertake the case against Harle; Mr. Lewis, Walsall, who defended Harle; and Mr. Baker, mines inspector for the district.—The Commissioner, in giving his decision, gave a summary of the facts, and referring to the convictions against Harle at Willenhall, said he was of opinion that, with regard to the three cases in which a nominal penalty was agreed to, no conviction, if the cases had been heard, could or ought to have ensued, and it was open to doubt if a conviction could have been obtained against Grant. The conviction under which Harle was fined 20l. and costs was different from the other convictions, and was doubtless of a very serious character. It was for neglecting to provide an adequate amount of ventilation. Reliance appeared to have been placed by Harle on the annular aperture between the scaffold and the brickwork of the shaft, which might perhaps have been sufficient if it had been kept clear, and the evidence fairly established that the system adopted was the one in general use, and that it would have succeeded in this instance had the ventilating pipes been carried under the scaffold there was little doubt. In coming to a conclusion there were some circumstances that should not be lost sight of—that the colliery was believed to be free from gas, that the men believed in the absence of gas and the sufficiency of ventilation, and that Harle enjoyed the confidence of the company. But he could not forget that six lives had been sacrificed by an omission on Harle's part in the discharge of duties intimately connected with his office, an omission for which he had been fined 20l. and costs. His judgment, therefore, was:—First, that the evidence established that the system of ventilation used at No. 4 pit was sufficient, such system being that adopted generally in the district, and that such system would in all probability have been sufficient in this instance if it had been fully and properly carried out. Secondly, that the system was not fully and properly carried out, inasmuch as it did not provide a sufficient means of ventilation under the scaffold where a careful manager ought to have expected that it might be found. Thirdly, that the manager ought not to have trusted entirely to the sufficiency of the annular aperture round the scaffold, especially as he must have known that it might have been filled by the coal and debris thrown upon it by the miners out of the headways. As a prudent man, he should have carried the pipes below or provided some other means of ventilating the space below the scaffold. Fourthly, that sufficient care was not taken to keep the opening round the scaffold from becoming tight. Fifthly, that the explosion was caused by the gas lodged beneath the scaffold escaping upwards by a hole left in the partially sealed up annular aperture, or by a hole made there by the men in clearing off the dirt and debris from the scaffold. The gas, undiluted as it was by want of sufficient air underneath, must have come in contact with the naked flame of a lighted candle. He was constrained to find that Michael Harle had not taken all the care, or made use of all the knowledge he must have been possessed of, for if destitute of this knowledge he must have found Harle guilty of incompetence under the statute. He was unable to find that he had been guilty of such incompetency or gross negligence, although he found that there had been such an amount of negligence as could not be passed over. The Court felt bound to order Harle to pay all the costs of the enquiry, such sum to be taxed by the proper officers of the Court if the parties could not agree to the amount, and to be paid within seven days after the amount had been agreed upon. He was pleased that he had not been able to find Harle guilty of incompetency or of such gross negligence as to unfit him for his duty. He did not think it necessary to withhold or to suspend the certificate of the certificated manager, and he therefore had much pleasure in handing it over to Mr. Lewis. He intimated that he should send the report to the Home Secretary on Monday.—Mr. Kettle, on behalf of the gentlemen present, thanked the Com-

missioner for the able and efficient way in which he had conducted the enquiry. Mr. Motteram briefly acknowledged the compliment, expressing his satisfaction at the way in which the case had been carried out by the parties concerned, and acknowledged the great assistance he had received from the mines inspector for the district.

SULPHURIC ACID AND ALKALI.

The importance of the alkali trade for supplying products essential to the very existence of some of our greatest industries was pointed out in the *Mining Journal* of June 7, 1879, in noticing the first volume of Prof. LUNGE's valuable treatise on Sulphuric Acid and Alkali; and from the outline then given no doubt could remain that the work, when complete, would be one of the most practical and reliable in the language. The second volume* fully justifies the opinion. It comprises the series of operations of an alkali works in which the Leblanc process is employed, beginning with the manufacture of sulphate of soda, and ending with the utilisation of soda waste; and the author takes the opportunity of announcing that in the third and concluding volume (already in the press) the manufacture of soda by the ammonia process and from cryolite, of bleaching powder, and of chlorate of potash, will be described, and then will follow a detailed estimate of the cost of plant for every part of an alkali works. A very copious appendix will, he says, contain numerous additions to the first two volumes, partly from patents, official reports, &c., published, and partly from private communications made to the author by competent persons since the volumes were printed.

Sodium sulphate was first described by Glauber in 1658. He made it from the residue remaining after the preparation of hydrochloric acid from common salt and sulphuric acid. At present the anhydrous salt (or, according to Thomsen, monohydrate) is obtained by dehydrating crystallised sulphate of soda, or by evaporating the aqueous solution at temperatures above 33° C. From strongly alkaline solutions anhydrous salt crystallises out even at ordinary temperatures. In an impure state it forms the sulphate or salt cake of the factories. Sodium sulphate is almost insoluble in absolute alcohol at ordinary temperatures, a little more so in alcohol acidulated with sulphuric acid. Therefore, alcohol precipitates sodium sulphate from a saturated cold solution; in dilute alcohol it is more soluble. Only a very small portion of the sodium sulphate is prepared in the crystallised state as Glauber's salt, principally that serving for pharmaceutical purposes, but now mostly used only in veterinary practice; all the rest is made as calcined sulphate or salt cake, the smaller portion being used as such (for instance, in glass making), the larger portion being at once converted into alkali. The different processes for preparing sulphate may be divided into those in which it is a principal product, and those in which it is a by-product. As a principal product nearly all the sulphate is obtained by decomposing common salt with sulphuric acid in the presence of air, according to Longmaid, Hargreaves, and other processes. As a by-product it is obtained usually in a very impure state in sundry chemical manufactures, especially in the manufacture of muriatic acid from common salt and sulphuric acid in cast-iron cylinders and in glass retorts; in the manufacture of nitric acid as "sally," with about 30 per cent. of free acid; and smaller quantities of sulphate are obtained in the manufacture of sal ammoniac by subliming ammonium sulphate with common salt; in that of corrosive sublimate from mercuric sulphate and common salt; in amalgamating silver ores; in roasting copper ores with common salt; in making aluminium from common salt and alum; in purifying mineral oils by mixing the sulphuric acid and caustic lye used in purifying, and skimming off the tar; in neutralising organic sulpho-acids, containing a large excess of sulphuric acid by soda; and especially from the alkaline fusions in the manufacture of resorcin, alizarine, &c.

The process of obtaining sulphate and hydrochloric acid from common salt and sulphuric acid is not merely that which up to this day furnishes the largest portion of all the sulphate, but at the same time the oldest—that employed by Glauber himself. The first who in England made sulphate by decomposing common salt with hydrochloric acid was William Losh, who had studied chemistry in France, and having returned to his native county at the beginning of this century erected a chemical works at Walker-on-Tyne. A weak brine spring existing there first gave occasion to this. In 1812 or 1815 lead chambers were erected, the product of which was partly sold as oil of vitriol, and partly employed for decomposing common salt obtained from various sources. The first furnaces for this purpose were made of lead and lined with bricks. The lead furnace, which stood a very short time, was in 1828 replaced by a brick furnace, and in 1840 by cast-iron decomposition pans, such as are now used both by Lee, at Felling-on-Tyne, and by Gamble, at St. Helen's. A second factory of a similar kind arose at Blyth in 1822, but 1823 was the real year of birth of the manufacture of sulphate and soda on a large scale—when the enormous salt duty was taken off, which had prevented any great extension. The various stages of manufacture are then fully described, and not only are ample particulars given, but there are also drawings to scale of the various furnaces and plant required. The succeeding chapter treats of the manufacture of sulphate by the Hargreaves process, and the historical portion affords a striking evidence of the labour and experiment necessary to make a process, although it may be correct in principle, of practical commercial utility. Patents referring to this process were taken out in 1850 by Gossage, in 1853 by Robb, in 1855 by Armbruster and Larst, in 1856 by Rémond, in 1857 by Brooman, in 1858 by Mesdach, in 1863 by Thibierge, also Longmaid's process of 1842, itself the revival of a much older process, applies the reaction that comes into play here certainly in a very different manner from the present. With all these, however, they were so far from perfection that Hargreaves and Robinson took no less than 20 patents after January, 1870, before the process was a thorough practical success. The costs, purification, and application of sulphate are dealt with in the next chapter, the general properties and preparation of hydrochloric acid, the condensation of hydrochloric acid, and the control of condensation, yield, purification, application, and conveyance of hydrochloric acid being then carefully treated of.

Soda forms the subject of the third book. The compound which now, excepting common salt, is technically the most important of all mineral salts, has not always held this rank, although it seems to have been known from the remotest antiquity. The Arabs sometimes called it nitrum, but more frequently kali or alkali, and even the expression soda occurs in Geber. All three expressions meant the same thing—fixed alkali of any kind. What we now call potash and soda or their salts were regularly confounded at that time, or taken for mere modifications of the same substance. The first who recognised a difference between them was Stahl in 1702; but Duhamel in 1736 first completely established the base of common salt as a peculiar substance different from that of the salt of tartar. Still some chemists would not admit the difference between "vegetable" and "mineral" alkali, and the matter was not decided until half a century after. The chapter of historical notes on the manufacture of artificial soda is a particularly interesting one. Crystal soda in 1814 cost 60l. per ton. In 1824, when Muspratt began to work Leblanc's process, crystal soda was 18l. per ton, and the present price per ton on the average of the last ten years is 4l. 10s.. A synopsis of the various plans proposed for the manufacturing of soda is given in the third chapter, and in subsequent chapters there are ample details concerning the manufacture of soda by the Leblanc process, raw materials, black ash furnaces, the theory of the soda process according to Leblanc, black ash and tank liquor, boiling down the tank liquor and calcining, purification of the ash, treatment of tank waste, and various other matters, the value of the information being much enhanced by the care which has been taken to give details of cost, objections and recommendations, and the drawings to scale. That the work will be more recognised as a text-book of the subject cannot be doubted, and a more exhaustive and reliable one need scarcely be desired; it is admirably written by a scientist of practical experience of the subject upon which he treats, and it is evident that no expense has been spared

* "A Theoretical and Practical Treatise on the Manufacture of Sulphuric Acid and Alkali, with the Collateral Branches." By GEORGE LUNGE, Ph.D., F.C.S., Professor of Technical Chemistry at the Federal Polytechnic School, Zurich (formerly Manager of the Tynes Alkali Works, South Shields). Vol. II. London: John Van Nostrand, Dinterman-row.

FORTY-SEVENTH ANNUAL REPORT OF THE
 NATIONAL PROVINCIAL BANK OF ENGLAND
 MAY 12, 1890

The work is one that is well worth reading, and it is difficult to know whether to praise the author more as a political economist, as a writer, or as a man of business, as his views in each position are so entirely free from contamination by those previously entertained that it is not easy to find anyone to compare him to; but his volume is admirably printed on excellent paper, and will form an ornament in any library in which it is placed.

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* "A History of the Precious Metals from the earliest times to the present." By ALEXANDER DEL MAR, M.E., formerly Director of the Bureau of Statistics of the United States; Member of the United States Monetary Commission of 1876. London: George Bell and Sons, York-street, Covent Garden.

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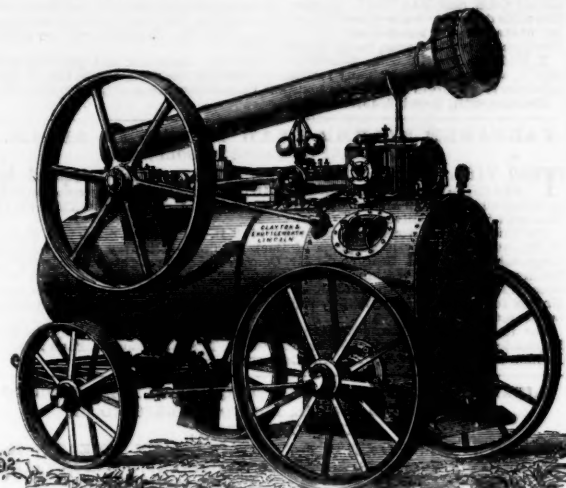
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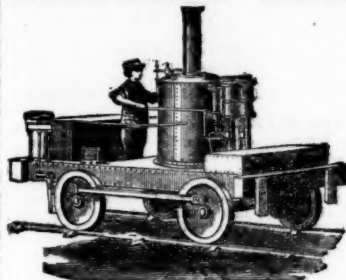
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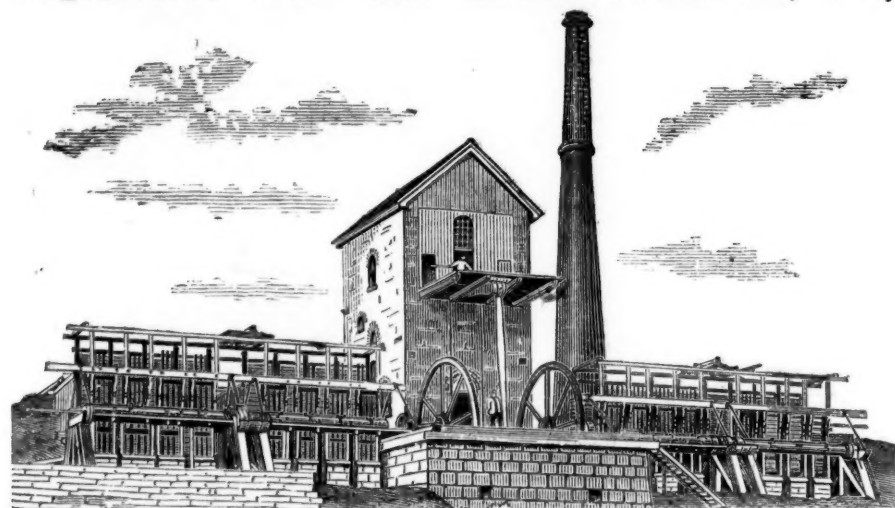
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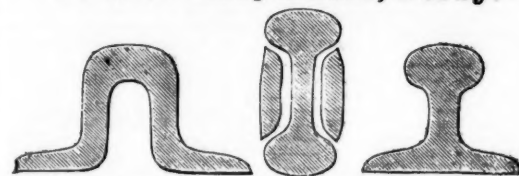
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THE MINING SHARE LIST.

BRITISH DIVIDEND MINES.

Shares.	Paid.	Last wk.	Clos. pr.	Total divs.	Per sh.	Last pd.
10000 Caron, <i>i</i> , Cardigan	2 0 0	2	1 1/2	0 4 0	0 2 0	Oct. 1878
10000 Carn Brea, <i>c</i> , <i>i</i> , Illogan	56 7 6	90	80 85	308 0 0	1 0 0	Feb. 1874
10240 Devon Gr. Consols, <i>c</i> , <i>i</i> , Tavistock	1 0 0	14	1 1/2	117 3 0	0 8 0	Feb. 1880
4296 Dolcoath, <i>c</i> , <i>i</i> , Camborne	10 14 10	68	55 57	116 11 3	1 10 0	Apr. 1880
6400 East Pool, <i>c</i> , <i>i</i> , Illogan	0 9 9	36	32 35	18 15 3	1 2 6	Mar. 1880
40000 Glas. Car., <i>c</i> (30000 sh. £1 pd., 10000 15s. pd.)	1 1/2	1 1/2	1 1/2	0 13 0	0 0 0	Aug. 1878
8000 Gorseid and Merilyn Con., <i>i</i> , Flint	2 10 0	2 1/2	2 1/2	0 5 0	0 5 0	Aug. 1877
15000 Great Laxey, <i>i</i> , Isle of Man	4 0 0	19	18 19	25 14 0	0 8 0	Apr. 1880
6400 Green Hurth, <i>i</i> , Durham	0 6 0	7 1/2	7 1/2	2 10 0	0 5 0	Mar. 1880
20000 Groswin, <i>i</i> , Cardigan	2 0 0	3 1/2	2 1/2	0 14 0	0 10 0	Aug. 1878
2500 Isle of Man, <i>i</i> , Isle of Man	25 0 0	—	—	82 5 0	0 10 0	Feb. 1879
20000 Lerdhills, <i>i</i> , Lanarkshire	6 0 0	3 1/2	3 1/2	0 15 0	0 3 0	Mar. 1878
400 Lisburne, <i>i</i> , Cardigan	18 15 0	37 1/2	30 35	600 10 0	1 0 0	Mar. 1880
10000 Mellanear, <i>c</i> , Hayle	2 6 0	5 1/2	5 1/2	0 16 0	0 2 0	Apr. 1880
9000 Minera Mining Co., <i>i</i> , Wrexham	5 0 0	10 1/2	11 12	68 13 2	0 4 0	May 1880
20000 Mining Co. of Ireland, <i>c</i> , <i>i</i>	7 0 0	2 1/2	2 1/2	24 0 0	0 2 0	Jan. 1880
5328 North Busy, <i>i</i> , <i>c</i> , Chacewater	0 5 8	1 1/2	1 1/2	0 3 4	0 10 0	Oct. 1878
11829 North Hendre, <i>i</i> , Wales	2 10 0	—	—	3 10 0	0 7 6	Mar. 1880
8653 Ditto	1 0 0	—	—	0 7 0	0 3 0	Mar. 1880
6000 Pennant, <i>i</i> , North Wales	5 0 0	3 1/2	3 3/4	0 10 0	0 5 0	Mar. 1878
12000 Phoenix United, <i>c</i> , <i>i</i> , Link	5 10 0	3 1/2	4 1/2	0 2 6	0 6 0	Dec. 1879
18000 Pr. Patrick, <i>s</i> , <i>i</i> , (als. 12000 p. 10 p.)	0 16 6	0 1	0 1	0 16 6	0 1 0	Dec. 1879
10000 Red Rock, <i>i</i> , Cardigan	2 0 0	2	1 1/2	0 4 0	0 2 0	Jan. 1878
12000 Roman Gravel, <i>i</i> , Salop	7 10 0	11 1/2	10 10 1/2	8 1 0	0 5 0	Oct. 1878
4000 Rhylalun, <i>i</i> , Wales	10 0 0	—	—	0 5 0	0 5 0	Feb. 1880
512 South Cardon, <i>c</i> , St. Cleer	1 5 0	135	115 125	748 0 0	2 0 0	Apr. 1880
6123 South Condurrow, <i>c</i> , <i>i</i> , Camborne	6 5 6	11 1/2	11 12	7 2 0	0 2 0	Apr. 1880
9000 South Darren, <i>i</i> , Cardigan	1 10 0	3 1/2	3 1/2	0 4 0	0 2 0	Apr. 1880
4500 South Wheel Franch, <i>i</i> , Illogan	7 12 4	18 1/2	17 18	40 5 6	0 18 0	Mar. 1880
12000 Tankerville, <i>i</i> , Salop	6 0 0	5	4 1/2	4 17 6	0 5 0	Jan. 1877
6000 Tincroft, <i>c</i> , <i>i</i> , Pool, Illogan	11 10 0	20	18 19	50 8 6	0 5 0	May 1877
15000 Van, <i>i</i> , Llandidies	4 5 0	19	18 19	24 10 6	0 10 0	Jan. 1880
3000 West Chiverton, <i>i</i> , Perranzabuloe	19 15 0	1 1/2	1 1/2	55 10 0	0 10 0	Feb. 1878
512 West Tolgus, <i>c</i> , Redruth	95 10 0	55	58 60	33 0 0	0 10 0	Jan. 1879
1200 West Wheel Seton, <i>c</i> , <i>i</i> , Camborne	25 10 0	27 1/2	22 1/2	223 0 0	0 7 6	Apr. 1878
12000 Wheel Crebor, <i>c</i> , Tavistock	2 4 0	4 1/2	3 1/2	0 3 9	0 3 9	Mar. 1880
1024 Wheel Eliza Consol, <i>i</i> , St. Austell	13 0 0	—	—	30 10 0	0 3 0	Feb. 1880
4295 Wheel Kitty, <i>i</i> , St. Agnes	5 4 6	5 1/2	5 1/2	12 9 6	0 10 0	Jan. 1880
2000 Wheel Peavor, <i>c</i> , Redruth	7 11 0	30	28 29	4 1 0	1 12 6	Feb. 1880

FOREIGN DIVIDEND MINES.

Shares.	Paid.	Last wk.	Clos. pr.	Total divs.	Per sh.	Last pd.
35500 Alamillos, <i>i</i> , Spain	2 0 0	1 1/2	1 1/2	2 0 9	0 1 0	Apr. 1880
130000 Almada and Tinto Consol., <i>s</i>	1 0 0	—	—	0 6 3	0 1 0	May 1876
20000 Australian, <i>c</i> , South Australia	7 0 6	1 1/2	1 1/2	1 3 6	0 2 0	Apr. 1879
20000 Cape Copper Mining, <i>s</i> , South Africa	7 0 0	39	38 40	37 7 6	0 17 6	Mar. 1880
35000 Cesena Sulph. Co., Romagna, Italy	10 0 0	—	—	1 1 0	0 1 0	Aug. 1879
10000 Copiapo, <i>c</i> , Chili	17 0 0	10	9 10	7 11 5	0 3 0	May 1877
23500 Eberhardt and Aurora, <i>s</i> , Nevada	10 0 0	4 1/2	4 1/2	1 8 0	0 3 0	Dec. 1877
70000 English and Australian, <i>c</i> , <i>i</i> , S. Aust.	2 10 0	1 1/2	1 1/2	2 13 9	0 1 0	Mar. 1880
25000 Fortuna, <i>i</i> , Spain	2 0 0	5 1/2	5 1/2	7 11 5	0 5 0	Apr. 1880
55000 Frontino & Bolivia, <i>c</i> , New Gran.	2 0 0	4	3 1/2	0 3 6	0 1 0	Feb. 1879
15000 Linares, <i>i</i> , Spain	3 0 0	6	5 1/2	18 2 10	0 8 0	Apr. 1880
10000 Pontgibaud, <i>s</i> , France	20 0 0	22	19 21	27 17 6	0 10 0	Dec. 1879
100000 Port Phillip, <i>c</i> , Clunes	1 0 0	—	—	1 13 4	0 1 4	Mar. 1880
54000 Richmond Consol., <i>s</i> , Nevada	5 0 0	15 1/2	16 15 1/2	8 11 8	0 7 6	Apr. 1880
1858280 Rio Tinto, <i>c</i> , S. Comp. Bds., Huelva	10 0 0	98	95 97	7 15 0	0 1 0	Jan. 1880
44125 Ditto, Mortgage Bonds	20 0 0	20 1/2	20 1/2	7 15 0	0 1 0	Jan. 1880
225000 Ditto, shares	10 0 0	12 1/2	12 1/2	0 10 0	0 10 0	Apr. 1880
40000 Santa Barbara, <i>s</i> , Brazil	0 10 0	2 1/2	2 1/2	0 10 9	0 2 0	Apr. 1880
120000 Scottish-Australian Mining Co.	1 0 0	2 1/2	2 1/2	15 0 0	0 15 0	Nov. 1879
80000 Ditto, new	0 10 0	1 1/2	1 1/2	15 0 0	0 15 0	Nov. 1879
32000 Sentein, <i>s</i> , <i>i</i> , Arles, France	1 0 0	—	—	0 2 0	0 2 0	Jan. 1880
22500 Sierra Buttes, <i>c</i> , California	2 0 0	1 1/2	1 1/2	2 0 6	0 1 6	Apr. 1879
40625 Ditto, Pumas Eureka	2 0 0	2 1/2	2 1/2	2 7 0	0 3 0	Oct. 1879
253000 St. John del Rey	215 225	—	—	12 1/2	0 1/2	for half-year, June 1879
20000 Tolima, <i>s</i> , <i>c</i> , Colombia	5 0 0	—	—	1 3 0	0 4 0	Mar. 1880
25000 Victoria, <i>c</i> , <i>i</i> , Australia	1 0 0	—	—	0 13 1/2	0 7 1/2	June 1879
3100 W. Prussian (5500 pref. sh. £10 pd.)	10 0 0	10 1/2	10 10 1/2	2 10 0	0 8 0	Apr. 1880

Have made calls since last dividend was paid.

NON-DIVIDEND BRITISH MINES.

Shares.	Paid.	Last wk.	Clos. pr.
25600 Aberllyn, <i>s</i> , <i>i</i> , Carnarvon	1 0 0	1 1/2	1 1/2
12000 Assheton, <i>i</i> , Carnarvonshire	5 0 0	—	—
11583 Bedford Unit., <i>c</i> , <i>i</i> , Tavis (£1 lib.)	0 4 0	1 1/2	1 1/2
25000 Belwady, <i>c</i> , <i>i</i> , Roche	1 0 0	1 1/2	1 1/2
30000 Bettwys-y-Coed, <i>s</i> , <i>i</i> (20000 sh. issued)	1 0 0	—	—
8000 Black Caelan, <i>i</i> , Cardigan	3 0 0	—	—
3939 Blue Hills, <i>c</i> , <i>i</i> , St. Agnes	4 6 0	4 1/2	4 1/2
30000 Bodirris, <i>i</i> , <i>i</i> , Denbighshire	1 0 0	1 1/2	1 1/2
200 Botallack, <i>c</i> , <i>i</i> , St. Just	126 5 0	90	80 90
10000 British, <i>s</i> , <i>i</i> , Wrexham	2 0 0	—	—
20000 Bwlch United, <i>s</i> , <i>i</i> , Cardigan	0 12 6	3 1/2	2 1/2
50000 Cambrian, <i>s</i> , <i>i</i> , Cardigan	2 0 0	2 1/2	2 1/2
6000 Carn Camborne, <i>c</i> , <i>i</i> , Camborne	0 2 6	2 1/2	2 1/2
20000 Carnarvon, <i>c</i> , <i>i</i> , Carnarvonshire	1 0 0	2 1/2	1 1/2
20000 Carn Foxdale, <i>i</i> , <i>i</i> , of Man	1 5 0	—	—
5120 Clementina, <i>c</i> , <i>i</i> , Llanrwst	1 0 0	1 1/2	1 1/2
25000 Coed Mawr Pool, <i>s</i> , <i>i</i> , Carnarvon	2 0 0	—	—
7500 Combella, <i>c</i> , <i>i</i> , Wendron	2 0 0	—	—
8000 Combmartin, <i>s</i> , <i>i</i> , North Devon	0 8 6	—	—
2450 Cook's Kitchen, <i>i</i> , Illogan	28 4 9	8 1/2	9 9 1/2
10000 Cornwall Great Consol., Callington	4 0 0	—	—
15500 Crook Grange United, <i>s</i> , <i>i</i>	0 17 6	3 1/2	3 1/2
8400 Crook Burn, <i>i</i> , Cumberland	0 17 6	3 1/2	3 1/2
14000 Crosswood Mining Lands, <i>s</i>	1 0 0	1 1/2	1 1/2
15000 Cwm Dwyfor, <i>c</i> , <i>i</i> , <i>s</i> , <i>i</i> , Carnarvon	1 0 0	—	—
25000 Cwm Fry, <i>s</i> , <i>i</i> , Wales	1 0 0	—	—
1280 D'Eresby Consol., <i>i</i> , <i>i</i> , Carnarvon	10 0 0	—	—
1024 D'Eresby Mountain, <i>i</i> , <i>i</i> , Llanrwst	20 0 0	—	—
20000 Denbighshire Consolidated, <i>s</i>	3 0 0	3 1/2	2 3
12000 Derwent, <i>i</i> , <i>i</i> , Durham	4 0 0	3 1/2	2 1/2
100000 Devon, <i>c</i> , <i>i</i> , Tavistock (125000 iss.)	0 1 0	1 1/2	1 1/2
10000 Duffry Syke, <i>i</i> , Durham	1 0 0	1 1/2	1 1/2
10000 Dunnas Bay, <i>s</i> , <i>i</i> , (3000 ord. sh.)	1 0 0	1 1/2	1 1/2
6144 East Cardon, <i>c</i> , <i>i</i> , St. Cleer	3 4 6	3 1/2	2 1/2
4000 East Chiverton, <i>i</i> , Perranzabuloe	9 10 3	1 1/2	1 1/2
3000 East Craven Moor, <i>s</i> , <i>i</i> , Pateley Bdg.	10 0 0	9	8 9
12000 East Crebor, <i>c</i> , <i>i</i> , Tavistock	0 4 0	1 1/2	1 1/2
15000 East Devon Consol., <i>c</i> , <i>i</i> , Devon	2 0 0	2 1/2	1 1/2
30000 East Florida, <i>s</i> , <i>i</i> , Cardigan	1 0 0	—	—
10000 East Longstone, <i>s</i> , <i>i</i> , Lezant	1 0 0	1 1/2	1 1/2
10000 East Longstone, <i>s</i> , <i>i</i> , Salop	1 0 0	1 1/2	1 1/2
18000 East Van, <i>i</i> , Llandidies	5 0 0	4	3 1/2
4096 East Wheel Buller, <i>c</i> , <i>i</i> , Gwennap	0 10 0	1 1/2	1 1/2
1114 East Wheel Lovell, <i>i</i> , Helston	13 8 2	2 1/2	2 1/2
30000 Flintshire Great Consol.	1 0 0	1 1/2	1 1/2
6000 Florence, <i>s</i> , <i>i</i> , St. Ive	5 0 0	5	5
10000 Fortescue, <i>s</i> , <i>i</i> , St. Stephens	1 0 0	2 1/2	2 1/2
12500 Frongoch, <i>i</i> , <i>i</i> , Cardigan (1000 sh. iss.)	2 0 0	2 1/2	2 1/2
3500 Gawton, <i>c</i> , <i>i</i> , Tavistock	4 9 6	1 1/2	1 1/2
10000 Glyn, <i>i</i> , <i>i</i> , Cardigan	1 0 0	1 1/2	1 1/2
20000 Great Dyfford (10000 sh. issued)	1 0 0	1 1/2	1 1/2
20000 Gt. F. Foxdale, <i>i</i> , <i>i</i> , of Man (£1 sh.)	0 18 0	—	—
12000 Great Holway, <i>i</i> , <i>i</i> , Flintshire	5 0 0	5	4 5
6000 Great Wh. Eleanor, <i>i</i> , North Bovey	2 0 0	2	2
20000 Griffin, <i>s</i> , <i>i</i> , Carnarvon	1 0 0	—	—
9880 Gwinnalake (Clitters), <i>i</i> , <i>i</i>	5 5 0	5 1/2	4 1/2
10000 Gwern-y-Mynydd, <i>s</i> , <i>i</i> , Flintshire	4 0 0	5 1/2	5 1/2
10000 Harehope Gill, <i>i</i> , <i>i</i> , Durham (£1 sh.)	0 5 0	—	—
1200 Hartington Moor, <i>i</i> , <i>i</i> , Derby	1 1 0	1 1/2	1 1/2
6400 Harwood, <i>s</i> , <i>i</i> , <i>i</i> , Durham	0 15 0	—	—
3000 Herodfoot, <i>i</i> , near Liskeard	1 0 0	4	3 1/2
18000 Hington Down, <i>c</i> , <i>i</i> , Calstock	0 7 0	1 1/2	1 1/2
6000 Killiforth, <i>i</i> , Chacewater	3 5 0	7 1/2	7 1/2
30000 Lady Ashburton, <i>s</i> , <i>i</i> , Callington	1 0 0	—	—
10000 Lady Bertha, <i>c</i> , <i>i</i> , Tavistock	0 2 6	3 1/2	3 1/2
12000 Ladywell, <i>i</i> , <i>i</i> , Salop (12000 pref. also)	2 10 0	3 1/2	3 1/2
5000 Lead Era, <i>s</i> , <i>i</i> , Mold	2 10 0	—	—
10000 Leighton, <i>c</i> , <i>i</i> , St. Just	1 0 0	—	—
15000 Llandegla, <i>i</i> , <i>i</i> , Llanarmon	1 0 0	—	—
6000 Llanawel, <i>i</i> , <i>i</i> , Wales	5 0 0	—	—
10000 Llanvann, <i>s</i> , <i>i</i> , Helston	1 0 0	2 1/2	1 1/2
5120 Lovell, <i>i</i> , <i>i</i> , Wendron	0 16 0	1 1/2	1 1/2
30000 Llanrwst, <i>s</i> , <i>i</i> , Carnarvon	2 0 0	1 1/2	1 1/2
7500 Ditto, 10 per cent. pref.	2 0 0	2 1/2	2 1/2
9000 Marke Valley, <i>c</i> , <i>i</i> , Linkinhorne	5 8 6	2 1/2	2 1/2
15000 Mawston, <i>s</i> , <i>i</i> , South Wales	1 0 0	1 1/2	1 1/2
6000 Medlyn Moor, <i>i</i> , <i>i</i> , Wendron	3 15 0	—	—
20000 Mid-Devon, <i>c</i> , <i>i</i> , (17000, 3d. ad. pd.)	0 6 1/2	3 1/2	3 1/2
8000 Mineral Corporation of Gt. Britain	10 0 0	—	—
8000 Mona, <i>c</i> , <i>i</i> , Anglesea	5 0 0	15	13 15
10000 Mynydd Gorddu, <i>i</i> , <i>i</i> , Cardigan	3 0 0	3 1/2	—
12000 Morfa Du, <i>s</i> , <i>i</i> , <i>i</i> , Anglesea	1 0 0	1 1/2	1 1/2
1414 Mount Carbis, <i>c</i> , <i>i</i> , Redruth	0 10 0	1 1/2	1 1/2
4678 New Broadford, <i>s</i> , <i>i</i> , <i>i</i> , Cardigan (£5 sh.)	3 18 0	—	—
12000 New Cathedral, <i>c</i> , <i>i</i> , Gwennap	1 0 0	—	—

NON-DIVIDEND MINES—continued.

Shares.	NOTED AND MINES continued.		Paid.	Last wk.	Clos. pr.
2400	New Cook's Kitchen, <i>c</i> , Illogan	.....	7 0 0	7	7 1/2
8000	New Dolcoath, <i>c</i> , <i>i</i> , Camborne	.....	3 0 0	—	—
6000	New Killy, <i>c</i> , <i>i</i> , St. Agnes	.....	0 2 0	1 1/2	1 1/2
10000	New Llanfair, <i>i</i> , <i>i</i> , Carnarvon	.....	1 0 0	—	—
3000	New Wheel Peavor, <i>c</i> , <i>i</i> , Redruth	.....	0 10 0	2 1/2	2 1/2
3500	New Trefort, <i>c</i> , <i>i</i> , Lelant	.....	6 0 0	—	—
5000	New Wye Valley, <i>i</i> , <i>i</i> , Montgomery	.....	1 0 0	1 1/2	1 1/2
5000	North Alfred Consol., <i>c</i> , <i>i</i> , Phillack	.....	6 2 0	1	—
10000	N. D'Eresby Mount, <i>s</i> , <i>i</i> , <i>i</i> , Carnarv.	.....	1 0 0	—	—
12000	North Herodfoot, <i>i</i> , <i>i</i> , Liskeard	.....	0 5 0	1	1 1/2
2000	North Levant, <i>c</i> , <i>c</i> , St. Just	.....	13 6 0	7	7 1/2
50000	North Molton, <i>c</i> , <i>c</i> , <i>m</i> , <i>t</i> , Devon	.....	1 0 0	—	—
2000	North Penruthal, <i>c</i> , <i>c</i> , Gwennap	.....	0 10 0	2	—
2936	North Trekerby, <i>c</i> , St. Agnes	.....	8 17 10	1/2	—
1000	North Zandora, <i>i</i> , <i>i</i> , Carnarvon	.....	2 0 0	1	1 1/2
3000	Par Penryn, <i>c</i> , <i>i</i> , <i>i</i> , Redruth	.....	2 0 0	2 1/2	—
6000	Parracombe, <i>s</i> , <i>i</i> , <i>i</i> , Devon	.....	2 0 0	—	—
45000	Parsys Corporation, <i>c</i> , <i>c</i> , <i>i</i> , <i>i</i> , <i>i</i>	.....	1 0 0	1 1/2	1 1/2
7500	Pateley Bridge, <i>i</i> , Yorkshire	.....	1 0 0	1 1/2	1 1/2
15000	Ditto (also 7500 sh. not issued)	.....	0 17 0	—	—
12000	Pen-y-Orsedd, <i>s</i> , <i>i</i> , Flintshire	.....	1 0 0	1 1/2	1 1/2
5000	Penhalls, <i>c</i> , <i>i</i> , St. Agnes	.....	3 17 6	3	2 1/2
7000	Pentwyn, <i>c</i> , <i>s</i> , <i>i</i> , Holywell, fully paid	.....	1 0 0	3	2 1/2
8000	Plympton, <i>c</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> , <i>i</i> ,				